An Empirical Study of Accounting Software Acceptance among Bengkulu City Students

SRIWIDHARMANELY* & VINA SYAFRUDIN

ABSTRACT

The objective of the study was to analyse the acceptance of the accounting software by accounting students using the Technology Acceptance Model (TAM). The results of this research were generated using the variables - the perceived ease of use, the perceived usefulness, the attitude towards using, the behavioural intention to use, and the actual system usage. These variables were analysed using the Structural Equation Model (SEM). The samples of this research were 162 accounting students who were able to operate accounting software (such as MYOB and GL) at Bengkulu City, Bengkulu Province, Indonesia. The results show that the perceived ease of use had a positive significant effect on the perceived usefulness, while the perceived usefulness had a positive significant effect on the behavioural intention to use and the behavioural intention to use had a positive significant effect on the actual system usage of the accounting software.

Keywords: Technology Acceptance Model; perceived ease of use; perceived usefulness; attitude towards using; behavioural intention to use; actual system usage; accounting software

INTRODUCTION

The phenomenon of information system technology development is a topical issue. The advance in information technology makes it easier for users to perform various activities in all areas of life, including simplifying various aspects of business activity (Indriantoro 2000). The ease resulting from the use of information technology could help the users to achieve efficiency and effectiveness in their activities. Information system technology also plays a role in the Accounting field. Statement of Accounting Concept No.2 Financial Accounting Standards Board (FASB) defines accounting as an information system. The Financial accounting standard states that the primary purpose of accounting is to provide the information for decision-makers. Technology information systems make it simple for the accountants to produce financial information that can be reliable, relevant, timely, understandable, and testable which helps in the decision making process of financial information users.

Current accounting practices in the business world have shifted radically as a result of the advance in information technology. One of the changes was in the processing of transaction data from paper media to electronic such as computers. Along with these changes, many varieties of software were developed to simplify the data processing of the company's financial transactions. A range of accounting software is available with the most well known currently including DacEasy Accounting, MYOB Accounting Plus, Zahir Small Business, and Accurate Accounting.

The use of accounting software will shorten the data processing time that usually takes a longer time if it is done manually and processing can be accelerated significantly and with a better level of accuracy. American Institute of Certified Public Accountant (AICPA) has created a new certificate of Certified Information Technology Professional (CITP). The CITP is certification for the accountants who have a broad knowledge in the field of technology and understand how the information system technology can be used in a variety of organizations. This reflects the AICPA recognition of the importance of information technology systems in relation to accounting.

The most useful information technology implementation phase is the process of technology adoption and transfer to enhance the user's competency. The most dominant factor is the availability of human resources capable of adoption, both as a transformer and a diversion of knowledge and technology skills as well as recipients of these technologies. The key success factor of information technology implementation is the user's willingness to accept the information technology. Information system technology is applied as the organization components together with the humans. Humans interact with the information systems. These interactions can cause behavioural problems. Although the technical quality of information systems technology implementation is getting better, the information technology systems still fail to be applied because people either refuse or do not want to use them for various of reasons.

Nasution (2006) stated that the use of information technology is determined by various factors, one of which is the characteristic of information technology users. The characteristic differences of information technology users

are also influenced by many factors, one of which is the behavioural aspect. The behavioural aspect of users that affect the success of information systems technology acceptance is the perception (Davis et al. 1989; Ferguson 1997) and attitude in accepting the use of information technology. In an attempt to accept the information system technology by the user, the adverse behaviour needs to be changed or the system needs to be prepared before, so that the users will accept it. Changing behaviour is done by analysing the causes and determinants of the behavioural. One of the causes of behavioural concerns the beliefs regarding the information system technology itself. Changing behaviour can be done by changing the individual's beliefs, regarding the acceptance of information system technology from negative to positive.

One theory that explains the technology acceptance model approach is the Technology Acceptance Model (TAM). TAM was developed by Davis (1989) and was based on the model of Theory of Reasoned Action (TRA). TAM is an intention-based model to develop, explain, and predict user acceptance of technology (Hu et al. 1999). It can be used to measure the level of user acceptance of technology and defines two factors that affect user acceptance of technology - the perceived usefulness and perceived ease of use in using the technology.

An accounting student is required to be able to follow information technology developments because by understanding and knowing the technology progress and development, students can implement the accounting information system technology, which is expected to make the student more competent, especially in the field of information systems technology. Accounting students are required to become competent accountants, for example, in the field of information systems technology. This is supported by the number of companies that expect accounting graduates to have a good knowledge of accounting, which is supported with specific expertise (soft skills) in the information systems technology field, such as accounting software.

The primary aim of this research was to provide an empirical evidence about the effect of: 1. Perceived ease of use on the perceived usefulness of the accounting software; 2. Perceived usefulness on the attitude toward using the accounting software; 3. Perceived ease of use on the attitude toward using the accounting software; 4. Attitude toward using on the behavioural intention to use the accounting software; 5. Perceived usefulness on the behavioural intention to use the accounting software; and 6. Behavioral intention to use on the actual system usage of the accounting software. To achieve these goals, a modified TAM was developed which has been investigated previously by Lee et al. (2003) who discusses accepting information systems; Zahra (2009) explores accepting the Internet; Wibowo (2008) explains accepting computer; Iman et al. (2008) discusses the acceptance of studentsite facilities; and Tangke (2004) explores the acceptance of computers in auditing.

LITERATURE REVIEW

BEHAVIOURAL ASPECT IN IMPLEMENTATION OF INFORMATION TECHNOLOGY

According to Bodnar and Hopwood (1995) there are three issues related to the application of computer-based information technology, namely, (a) Hardware, (b) Software, and (c) Brainware. These three elements interact with each other and are connected by input-output media, in accordance with their respective functions. Hardware is the medium used to process information. Software includes the systems and applications used to process the input that is, information, while brainware is the most important one because of its function as the developer of hardware and software, as well as operator input and receiver output as the system user. The user of the system is man, who according to psychology has behavior embedded in him, therefore behavioural aspects in the context of humans as the brainware of information technology is important as a determining factor in every person that uses it.

According to Sham (1999), consideration of this behaviour needs special attention in the context of the application of information technology. This opinion is in line with Shin and Edington (2007), who stated that technical factors, behaviours, situations and information technology personnel users need to be considered prior to the implementation of information technology. Shin and Edington (2007) also suggested that user behaviour, and personal development systems are needed in the system. This relates to the understanding and views of the system users. It can be concluded that the perception of the personnel (the people) involved in the implementation of the system will have an effect on the system outcome, whether the system is successful or not, acceptable or not, beneficial or not, and applicable or not.

Behavioural aspects in the application of information technology is one aspect that is important to note, because it deals directly with the user, and the interaction between the user and a computer device is influenced by perceptions, attitudes, and affection as behavioural aspect which is inherent in human as a user. The implementation of a system and information technology can not be separated from the behavioural aspects because system development is related to individuals and organizational problems as the system users, and, therefore, the system developed must be oriented to the users.

TECHNOLOGY ACCEPTANCE MODEL

Several models have been designed to analyse and understand the factors that influence the acceptance of the computer technology use, and have been recorded in the literature and references on research in the field of information systems technology including - the Theory of Reasoned Action, Theory of Planned Behaviour, and the TAM (Jantan & Chin 2001). The TAM model developed by

Davis (1989) is one of the most widely used models in IT research (Iqbaria et al. 1997; Adam et al. 1992; Jantan & Chin 2001; Chin & Todd 1995), because this model is simple and easy to apply (Iqbaria & Davis 1995).

The TAM model was adapted from the model of the Theory of Reasoned Action, which is the theory of reasoned action developed by Fishbein and Ajzen (1980), with a premise that the reactions and perceptions of a person about something will determine the attitude and the behaviour. This theory is to model one's behaviour as a function of objective behaviour. The aim of behaviour is determined by the attitudes of these behaviours, thus, it can be understood that the reactions and perceptions of users of information technology will affect one's attitude to accepting the use of the information technology. One of the factors that can have an affect is the user's perception of the usefulness and ease of information technology use, thus, this is the reason of users in accepting the information technology.

The TAM model was developed from psychological theory to explain user behaviour, such as based on belief, attitude, intention and the user behaviour relationship (Jogiyanto 2007). The purpose of this model is to explain the main factors of user behaviour of information technology to the acceptance of information technology itself. The TAM model, in greater detail, explains the acceptance of information technology with specific dimensions that can easily affect the receipt of information technology by the user. This model puts the attitude factor of each user's behaviour into two variables - usefulness and ease of use. The model of TAM is described in Figure 1 below:
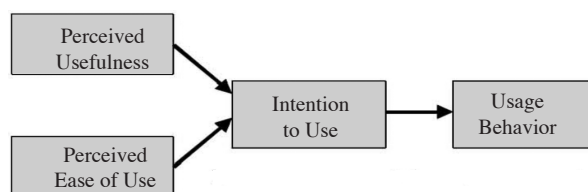

FIGURE 1. Technology Acceptance Model (TAM) (Davis 1989)

Empirically, this model has been proven to give an idea of the user behaviour aspect of information system technology, where many users of information systems technology can receive the information technology easily and fit with their needs (Igbaria et al. 1997). Both TAM model variables - usefulness and ease of use - can explain the behavioural aspects of the user (Davis 1989). The TAM model can explain that the users' perception will determine one's attitude in accepting the use of information technology. This model more clearly illustrates that the acceptance of information technology use is affected by the usefulness and ease of use. The usefulness and ease of use have high determinant and validity which has been tested empirically (Chau 2001; Davis 1989).

The TAM model developed by Davis (1989) has also been extended by researchers such as Igbaria (1995, 1997), Ferguson (1997) and Chin and Todd (1995). Chin and Todd (1995) divide the two factors on the benefit variables: (1) usefulness and (2) the effectiveness of their own dimension. Ferguson's (1997) research results show that the work result variable is influenced by the use of micro-computers and that computer user attitudes are influenced by the usefulness and the ease of use.

PERCEIVED EASE OF USE AND PERCEIVED USEFULNESS

Davis (1989) defines ease of use as the degree to which a person believes that using a particular system would be free of effort or a level where a person believes that information technology (such as accounting software) can be easily understood. While perceived usefulness is defined as the degree to which a person believes that using a particular system would enhance his or her job performance (Davis 1989). According to Adam et al. (1992), use intensity and interaction between the users and the system can also illustrate the ease of use. The system which is often used shows that the system is better known, easier to operate and use by users. If someone finds that it is easy to use information technology (in this study - Accounting software) they will feel that the information technology is useful for them.

Wibowo (2008), in his research, proved that the perception of ease of use affects the perception of usefulness. Morris and Dillon (1997) also proved that the perceived ease of use is positively significantly correlated to the perceived usefulness of the software. Further, Christina and Donald (2004) proved that the perceived ease of use was positively correlated with the perceived usefulness of the Internet. Teo et al. (2008) also found that the perceived ease of use supported the perceived usefulness of technology use before teaching in Singapore and Malaysia. Furthermore, Zahra (2009) proved that the perceived ease of use has a positive influence on the perceived usefulness of the Internet as a students' reference. Therefore, someone will be interested in using accounting software if it is useful. Thus, the first hypothesis to be tested is:

H$_1$: The perceived ease of use has a positive significant effect on the perceived uselfulness of accounting software.

PERCEIVED EASE OF USE AND ATTITUDE TOWARD USING

The perceived ease of use construct is also a belief about the decision making process. If someone feels confident that accounting software is easy to use then they will want to use it, whereas, if a person feels confident that the accounting software is not easy to use they will not want to use it. Meanwhile, attitude towards using was defined by Davis (1989) as a negative or positive feeling towards information technology of someone who has to perform

the desired behavior. The research of Davis (1989) showed that this perceived ease of use construct influences attitude. Wibowo (2008) also proved that the perceived ease of use affects the attitude of using technology. In contrast, Yogesh and Dennis (1999) proved that the perceived ease of use had no positive significant effect on attitude towards using information systems, which is influenced by social factors.

Tangke (2004) proved that the perceived ease of use affects the attitude of using technology in the use acceptance of Computer Assisted Audit Techniques. In addition, Morris and Dillon (1997) proved that the perceived ease of use positively significantly influenced the attitude towards using software. Based on research conducted by Hong et al. (2000) on the acceptance of digital library use, perceived ease of use positively significantly impacted the attitude towards using technology. If someone feels that it is easy to use accounting software it will determine their attitude towards it. Thus, the second hypothesis to be tested is:

H_2: The perceived ease of use has a positive significant effect on the attitude towards using accounting software

PERCEIVED USEFULNESS, ATTITUDE TOWARDS USING AND BEHAVIOURAL INTENTION TO USE

As described above, perceived usefulness is also a belief about the decision making process. Davis (1989) showed that the perceived usefulness was the most significant and important variable in influencing the attitude. The behavioural intention to use is defined as an interest of a person to perform certain behaviours in using a particular system. These following studies showed that the construct of perceived usefulness has a positive significant influence on the use of information systems (Chau 2001 on the development of the CASE system; Igbaria et al. 1997 on the use of computers). These researches show that perceived usefulness was the most significant and important construct influence on the attitudes, intentions and behaviour in the use of technology compared to other constructs.

Morris and Dillon (1997), in their research, proved that the perceived ease of use positively significantly influenced the attitude of using software. Morris and Dillon (1997) also proved that the perceived ease of use was related positively significantly to the behavioural intention to use software. Teo et al. (2008) in examining the intensity of technology use in teachers before teaching in Singapore and Malaysia proved that the perceived ease of use supported the attitude towards using and behavioural intention to use technology. Zahra (2009) also proved that the perceived usefulness has a positive significant effect on the behavioural intention to use the Internet by students as a source of literature. However, Yogesh and Dennis (1999) proved that the perceived usefulness did not have a positive significant effect on the attitude towards using and behavioural intention to use the information systems which are affected by social factors.

Various other empirical evidence also determined that behavioural intention is positively influenced by perceived usefulness (Agarwal & Prasad (1997) on the acceptance of information technology; Davis et al. 1989 on the acceptance of information technology; Hu et al. 1999 on acceptance of health technologies; Jackson et al. 1997 on the acceptance of information systems; Venkatesh & Davis (1996) regarding the acceptance of technology in decision sciences; Venkatesh & Morris (2000) on the acceptance of information technology). Thus the third and fourth hypotheses proposed in this study are:

H_3: The perceived usefulness has a positive significant effect on the attitude towards using accounting software

H_4: The perceived usefulness has a positive significant impact on the behavioural intention to use accounting software

ATTITUDE TOWARDS USING AND BEHAVIOURAL INTENTION TO USE

As described above (point 2.5), attitude towards using was defined by Davis (1989) as the negative or positive feeling towards information technology of someone who has to perform the desired behaviour. While, behavioural intention to use is defined as an interest of a person to perform certain behaviours in using a particular system. The research conducted by Taylor and Todd (1995) regarding acceptance of the information system use, and Venkatesh and Davis (2000) on the acceptance of information technology, show that the attitude had a positive significant influence on behavioural intention. Wibowo (2008), in his research, also proved that attitude affected intention to use technology. However, Teo et al. (2008) proved that the attitude of using technology did not positively affect the behavioural intention of the teacher before teaching to use technology in Singapore and Malaysia. Someone will behave if they have the desire or interest (behavioural intention) to do so. Thus, the fifth hypothesis proposed is:

H_5: The attitude towarda using has a positive significant impact on the behavioural intention to use accounting software

BEHAVIOURAL INTENTION TO USE AND ACTUAL SYSTEM USAGE

Behavioural intention to use is the interest of a person to do something and make it real. Behaviour is the action performed by someone. In the context of the use of information technology systems, behaviour is the actual use of information technology. Wibowo (2008), in his research, proved that the interest in using technology had a positive significant effect on the actual use of technology. Nelvia and Harahap (2009) also proved that the construct of the behavioural intention to use had a positive significant

effect on actual system usage. Thus, the sixth hypothesis proposed is:

H_6: The behavioral intention to use has a positive significant impact on actual system usage of accounting software

DATA AND METHODOLOGY

DEFINITION AND MEASUREMENT OF OPERATIONAL VARIABLES

These variables are known as sources or independent variables which are not predicted by other variables in the model. In this study the exogenous construct is the perceived ease of use. The perceived ease of use is the degree to which accounting students believe that using accounting software would be free of effort or it can be easily used. The dimensions of the perceived ease of use construct consist of x1 = flexibility (2 questions), x2 = easy to be studied or understood (2 questions), and x3 = easy to use (2 questions).

ENDOGENOUS CONSTRUCTS

These endogenous variables are all factors that are predicted by single or multiple constructs. Endogenous constructs can predict one or several other endogenous constructs; however, endogenous constructs can only be associated causally with endogenous constructs. In this study, endogenous constructs include Perceived Usefulness, Attitude towards Using, Behavioural Intention to Use, and Actual System Usage.

The perceived usefulness construct consisted of y1 = enhance the effectiveness (2 questions), y2 = improve performance (2 questions), and y3 = increase efficiency (2 questions). The attitude towards using construct consisted of y4 = flavour received (2 questions), y5 = sense of rejection (2 questions), Y6 = feeling (affective) (2 questions). The dimensional construct of behavioural intention to use were Y7 = addition of other accounting software (2 questions), Y8 = motivation to keep using (2 questions), y9 = motivate other users (2 questions). The construct of the actual system usage consisted of y10 = actual usage (2 questions), y11 = frequency of use (2 questions), y12 = user satisfaction (2 questions). The research instruments used by researchers were the questionnaires from Wibowo (2008) which were adapted to the object and sample research: behaviour of accounting students in accounting software use. All the exogenous and endogenous variables were measured by using a 5-point Likert scale, with the lowest score (one point) indicates strongly disagree, while the highest score (five point) which indicates strongly agree with those statements.

SAMPLING METHOD

The population of this study were students in the Accounting Department at the Bengkulu and Dehasen University in Bengkulu city. The sampling technique used was the purposive sampling (judgmental sampling) method. It is a non-probability sampling technique which selected sample based on the specific characteristics that were seen to have a close connection with the characteristics of identified populations (Indriantoro and Supomo 2002). The accounting students should know and be able to operate the accounting software (as a part of the information technology), because this ability could enhance their competencies and constitute a competitive advantage in the labour market. Furthermore, the Accounting Departement has included the accounting software in their curriculum. Samples selected in this study are accounting students who know and can operate the accounting software and have taken the Accounting Information Systems (AIS) and/ or Accounting Systems courses. The reason for selecting the samples is because these students were considered to understand the accounting software together with the accounting process.

DATA ANALYSIS METHOD

NORMALITY TEST

The most fundamental assumption in multivariate analysis is normality, which is a form of a distribution of data on a single metric variable in generating a normal distribution (Hair et al. 1998). If the assumption of normality did not meet and there are large deviations of normality, none of the statistical test results are valid because the t-test calculations, etc., are calculated on the assumption of normal data. To test whether or not the assumption of normality is violeted, one can use the z-statistic for skewness and kurtosis. If the value of z, for both z-kurtosis and/or z-skewness are significant (less than 0.05 at 5% level), it can be concluded that the data distribution is not normal. In contrast, if the value of z-kurtosis and/or z-skewness are not significant (greater than 0.05), it means that the data distribution is normal.

TEST OF MODEL FIT

There are several criteria that can be used to determine whether a model is accepted or rejected, including (Gozali 2005):
1. Chi-square statistic; the Chi-square statistic is used to measure the overall fit. Models are good or satisfactory if they have a low value. The smaller the Chi-square value, the better a model. This is concluded by the ratio between the values of the Chi-square statistic with the degrees of freedom.
2. Goodness of Fit Index (GFI); GFI measures the accuracy of the model in generating the observed covariance matrix. GFI is a good value if it is between 0 and 1.

3. Adjusted Goodness of Fit Index (AGFI); AGFI is the same as GFI, but has a degree of freedom in the model. A value of 1 means that the model has a perfect fit.
4. Root Mean Square Error of Approximation (RMSEA); RMSEA measures the deviation of the parameters in a model with the population covariance matrix (Browne & Cudeck 1993). Steiger (1989) advocated the use of confidence intervals to assess the accuracy of RMSEA estimates. The p-value for the fit test (RMSEA <0.05) must be greater than 0.5.
5. Non-Centrality Parameter (NCP); NCP is used to measure the deviation between the sample covariance matrix and fitted (model) covariance matrix. The model is said to fit when the value of NCP is small and the model has a bad value if it has a large NCP.

HYPOTHESIS TESTING

All the hypotheses were tested by using Structural Equation Models (SEM) analysis. To determine if there is a significant relationship between variables, the t-test must be greater than the t-table at a certain level, which depends on the sample size and the level of significance. The number of samples in this study is more than 150, and therefore, a significance level of 5% is used. To produce a significant relationship between variables, the result of the t-test must be greater than the t-table at level 5%, i.e ± 1.960. The research model used to test the hypothesis in this study is:
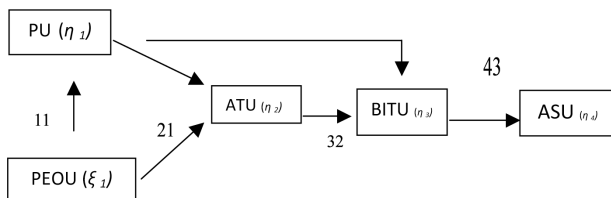
To test the hypothesis, the structural equations were:

$$PU \quad = \quad \gamma_{11}PEOU + \zeta 1 \tag{1}$$

$$ATU \quad = \quad \gamma_{21}PEOU + \beta 21PU + \zeta 2 \tag{2}$$

$$BITU \quad = \quad \beta_{32}ATU + \beta 31PU + \zeta 3 \tag{3}$$

$$ASU \quad = \quad \beta_{43}BITU + \zeta 4 \tag{4}$$

Notes:
- PU = Perceived Usefulness
- PEOU = Perceived Ease of Use
- ATU = Attitude towards Using
- BITU = Behavioural Intention to Use
- ASU = Actual System Usage (ASU)
- ξ = latent exogenous variables (independent variables)
- η = latent endogenous variable (dependent variable)

γ = a direct relationship between the exogenous variables on endogenous variables
β = direct relationship between the endogenous variables on endogenous variables
ζ = error in the equation between exogenous variables and / or endogenous to endogenous variables.

FINDINGS AND DISCUSSION

PROFILE OF RESPONDENTS

Based on 162 questionnaires information concerning the demographics of the respondents was obtained as a reference to identify their characteristics. The demographics of the respondents in this study are gender, education level, subjects, types of accounting software that can be operated, language versions of accounting software, and how to acquire skills using accounting software.

TABLE 1. Profile of Respondents

	Frequency	Percentage
Sex:		
Male	48	29.6
Female	114	70.4
Education level:		
D1	0	0
D2	0	0
D3	38	23.5
S1	124	76.5
Courses taken:		
Accounting system	38	23.5
Accounting information system	124	76.5
Accounting software that can be operated:	144	88.8
MYOB	15	9.3
MYOB and General Ledger	3	1.9
General Ledger		
Language version :		
English	51	31.5
Indonesian	108	68.5
The way to get the ability:		
Private courses/training	14	8.7
Tutorial	5	3.1
Regular courses	143	88.2

As shown in Table 1, concerning the sex of the respondents, most are women with 70.4% and men with 29.6%. For the education levels it can be seen that most of the accounting students were in the S1 level (undergraduate) with 76.5%, while the rest were in D3 (Diploma) the education level with 23.5%. In viewing the courses taken, 24.7% of the accounting students have taken Accounting System courses, and the rest 122 students or 75.3% had taken Accounting Information System courses.

Type of accounting software that can be widely operated by students were MYOB with 88.8%; 9.3% can operate both General Ledger and MYOB, and the rest 1.9% can only operate General Ledger. A total of 68.5% students liked using the Indonesian Version of the accounting software and 31.5% liked the English version. The ability to use accounting software was mostly acquired from the regular courses 88.2%; 3.1% obtained the skill from the tutorials; and the remaining 8.7 % acquiring these skills from private courses/training.

DESCRIPTIVE STATISTICS

The results of descriptive statistics (Table 2) show that the average of the respondents' answers of perceived ease of use and perceived usefulness variables were above 3.500, which indicate that the respondents agree that the accounting software was easy to use and is useful. The average value of the respondent's answer to the attitude towards using variable was 3.300. This value shows that most respondents gave a neutral answer to the attitude towards using variable. This indicates the accounting students have no attitude to use the accounting software regularly.

The behavioural intention to use variable also had an average value of 3.690 for the respondent's answer which indicates that most respondents were motivated to use the accounting software. Meanwhile, the actual usage system variable had an average value of 3.228 for the respondent's answer. This value indicates that most of the students did not use this accounting software regularly.

NORMALITY TEST RESULTS

The normality of the data distribution was tested by the z-statistic value of skewness and kurtosis. Data distribution is normal if the z-statistic (P-Value) of skewness and kurtosis is greater than 0.05. From the test results only the X3, X4, X6, Y11, Y19, Y21 had a z-statistic value of skewness and kurtosis above 0.05. Because only 6 of the 35 questions had a normal data distribution, the data must be normalized. To normalize the data, the facility in the normal score statistics menu for SEM was used. From this data normalization process, the P-value of skewness and kurtosis obtained was above 0.05 for all of questions. Therefore it could be concluded that all the data were normal and could be used to test the hypotheses.

MODEL FIT TEST RESULTS

The model fit test was used to see whether the research model was valid and reliable. Based on the five tests of model fit analysis - Chi-Square (X2), Goodness of Fit Index, Adjusted Goodness of Fit Index, Root Mean Square Error of Approximation (RMSEA), and Non-Centrality Parameter - the model of this research has a good fit (valid and reliable) to test the hypotheses. The model fit test results are shown in Table 3 below:

HYPOTHESIS TEST RESULTS

The statistical model used to test the six hypotheses is the Structural Equation Model. This study used a 5% significant level with a t-table value of 1.960. The hypotheses test results are shown in Table 4 below:

TABLE 2. Descriptive Statistic of Variables

No	Variables	Mean	Median	Modus	Standar Deviasi
1	Perceived Ease Of Use (PEOU)	3,575	3,670	3,670	0,48555
2	Perceived Usefulness (PU)	3,700	3,830	4,000	0,48402
3	Attitude Towards Using (ATU)	3,300	3,330	3,330	0,36676
4	Behavioural Intention To Use (BITU)	3,690	3,830	4,000	0,52074
5	Actual System Usage (ASU)	3,228	3,300	3,000	0,49925

TABLE 3. Model Fit Test Results

Measurement	Value
Degrees of Freedom	399
Minimum Fit Function Chi-Square	1075.060 (P = 0.0)
Estimated Non-centrality Parameter (NCP)	623.843
90 Percent Confidence Interval for NCP	(533.248 ; 722.105)
Root Mean Square Error of Approximation (RMSEA)	0.0985
90 Percent Confidence Interval for RMSEA	0.0911 ; 0.106)
P-Value for Test of Close Fit (RMSEA < 0.05)	0.000
Goodness of Fit Index (GFI)	0.702
Adjusted Goodness of Fit Index (AGFI)	0.653

TABLE 4. The Hypotheses Test Results

No	Hasil Ouput			t-test	R^2
1	PU PU	= =	γ_{11}PEOU + $\zeta1$ 0.443*PEOU	4,112	0,197
2	ATU ATU	= =	β_{21}PU +γ_{21}PEOU + $\zeta2$ 0.207*PU − 0.103*PEOU	0,851	0.0345
3	ATU ATU	= =	β_{21}PU − γ_{21}PEOU + $\zeta2$ 0.207*PU − 0.103*PEOU	1,520	0,0311
4	BITU BITU	= =	β_{31}PU + β_{32}ATU + $\zeta3$ 0.399*PU + 0.202*ATU	3,332	0,226
5	BITU BITU	= =	β_{31}PU + β_{32} + $\zeta3$ 0.401*PU + 0.204*ATU	1,706	0,226
6	ASU ASU	= =	β_{43}BITU + $\zeta4$ 0.700*BITU	4,074	0,491

Based on the results of the t-test which were greater than the t-table, the hypothesis 1 (perceived ease of use) has a positive significant effect on perceived usefulness of the accounting software, hypothesis 4 (perceived usefulness) has a significant positive impact on the behavioural intention to use the accounting software, and hypothesis 6 (behavioural intention to use) has a significant positive impact on actual system usage, were not rejected. While based on the results of the t-test which were less than the t-table, hypothesis 2 (perceived ease of use) has a significant positive effect to attitude toward using the accounting software, hypothesis 3 (perceived usefulness) has a significant positive effect on attitude toward using the accounting software, and hypothesis 5 (attitude towards using) has a significant positive impact on behavioural intention to use the accounting software, were rejected.

ANALYSIS AND DISCUSSION

The perceived ease of use has a positive significant effect on the perceived usefulness of the accounting software (hypothesis 1). This shows that if the accounting software used by the accounting students was more familiar, easier to operate, and easier to use, then they felt that it could improve their performance, effectively and efficiently. In other words, the accounting software would be more useful to them. Most students found that it was easy to use the MYOB and GL as the accounting software; in addition they felt that it would be useful for them. For the Indonesian version, the accounting students felt more flexible operating the MYOB and GL because they were easier to learn and understand, and easier to use. This research result is in line with the research done by Davis (1989), Wibowo (2008), Morris and Dillon (1997), Christina and Donald (2004), Teo et al. (2008) and Zahra (2009).

The perceived ease of use did not significantly influence the attitude towards using the accounting software (hypothesis 2). This indicates that although the accounting software was easy to use and beneficial to the accounting students, it did not affect the accounting students' attitude towards using it. If someone finds it easy to use information technology it will determine their attitude towards information technology. In the attitude towards using variable, Davis (1989) states that the interest/feeling (affective) is the most important factor in determining the attitude to accept or reject using technology.

From the questions concerning the attitude towards using variables, the respondents' averages answers agree to the questions that explained the attitude of accept/reject the accounting software use. The average answers of feeling comfortable using accounting software was 3.407; attitude receiving authorization was 3.222; attitude did not reject the Accounting software use was 3.914; and the accounting software use did not waste time was 3.969. This means that the accounting students had the attitude to accept the accounting software. However, the average answers describing feelings, interest (affective) of respondents to the accounting software, were not happy (2.827) and they felt bored when operating the accounting software (2.463).

Thus, partly the accounting students had the attitude to accept using the accounting software (i.e. MYOB and GL) but had no interest in using the accounting software regularly. They only used it as a part of their course's requirement and they had difficulty to operate the accounting software because most of the accounting software language version is only available in English. Most of them preferred to use the accounting software in the Indonesian language (108 of 162 students prefer the Indonesian version of the accounting software). This is in line with research done by Yogesh and Dennis (1999), which proved that the perception of ease of use did not significantly influence the attitude of using the information systems technology.

The perceived usefulness did not significantly influence the attitude towards using the accounting software (hypothesis 3). This indicates that the student's perception of usefulness of the accounting software has

no effect on their attitude to using it. Accounting students felt that they could operate the accounting software and that it will provide benefits for them, however, they had no attitude of interest in using accounting software regularly. As described above, most of them, 88.2% (143 students), acquired their expertise to operate the accounting software from regular subjects/courses but language was the main obstacle for using it. In the attitude towards using technology, the attraction was a determinant factor in accepting or rejecting to use the technology. This is also in line with research done by Yogesh and Dennis (1999), which proved that the perception of usefulness did not significantly influence the attitude to using the information systems technology.

The perceived usefulness had a positive significant impact on the behavioural intention to use the accounting software (hypothesis 4). The accounting students felt that by using the accounting software, they could improve their performance, be effective and efficient and had the tendency to continue using it. They would continue using it by installing other accounting software to increase its capacity, software antivirus security to obtain data, and would motivate other students to use it. This result is consistent with the research done by Zahra (2009) and Teo et al. (2008).

The attitude towards using did not significantly affect the behavioral intention to use the accounting software (hypothesis 5). Most of the students obtained skills in using accounting software (MYOB and GL) as a part of a regular course, so they must accept using accounting software although the language presented an obstacle in operating it. This affected their interest in using it (see explanation on hypothesis 2). Attraction has a crucial factor in determining the attitude to use it. The accounting students felt dislike and were bored with the display/interface of the accounting software. Students had no attraction to use the accounting software so they did not have a tendency to continue using it regularly. This result is consistent with research done by Teo et al. (2008) which proved that the attitude towards using did not positively influence the behavioural intention to use technology in teachers before teaching in Singapore and Malaysia.

The behavioural intention to use had a positive significant impact on the actual system usage (hypothesis 6). Behaviour of intention in using the technology is the tendency of behaviour to continue using the technology. Someone will still use the technology, which will affect the actual use of technology in the form of frequency and duration of use of technology. In this study, the accounting students felt that if they had the tendency to use accounting software, then they would keep using it regularly and if they kept using it regularly, it would be directly related to the frequency and duration of using it. This is in line with the research done by Nelvia and Harahap (2009), which proved that the variable of behavioural intention to use positively significantly affected the actual system usage. This is also consistent with the research of Wibowo (2008) which proved that the interest in using technology had a positive significant effect on the actual use of technology.

Conclusions and Implications

The results of this study strongly support the development theories relating to user behaviour in the acceptance of a technology such as TAM which was developed by Davis (1989). This study tested the behaviour of the accounting students in Bengkulu city in accepting the accounting software. The samples in this study were 162 accounting students at universities in Bengkulu city, who could operate the Accounting software (General Ledger and MYOB) and had taken the accounting System and/or Accounting Information System courses.

By using Structural Equation Model analysis, we concluded that *first*, the perceived ease of use had a positive significant impact on the perceived usefulness of the accounting software. The accounting students argued that when they could easily use/operate the accounting software, it would provide the use/benefit to them. *Second,* the perceived ease of use did not significantly influence the attitude towards using the accounting software. Although accounting students found it was easy to use/operate the accounting software it did not affect their attitude to use accounting software. *Third,* the perceived usefulness did not significantly influence the attitude towards using of the accounting software. The results also indicate although that accounting students argued that the accounting software would be useful to them it did not affect their attitude to use it regularly.

Fourth, the perceived usefulness had a positive significant impact on the behavioural intention to use. The accounting students agreed that if the accounting software was useful for them then they would have a tendency to continue to use it. The attitude towards using it did not significantly affect the behavioural intention to use. The attitude of accounting students to use accounting software did not affect their intention to use it. Therefore, although students felt that they could operate it and felt that its use would provide benefits to them this did not influence their attitude or their behaviour to use it regularly, which was proved by the intensity of their use. This was in line with their opinion that the behavioural intention to use had a significant positive impact on actual system usage. When the accounting students had great interest in using accounting software regularly, it would affect the actual use of the technology on a regular basis.

As a general objective, we know the behaviour of accounting students in Bengkulu city in accepting the accounting software as one of their competencies. They agreed that the accounting software will enhance their capacity, and will provide their competitive advantage in the labour market. They also realized that there are many kinds of accounting software available on the market and that they will face different kinds of accounting software in their future jobs. Therefore, they want to keep learning

to enhance their skills eventhough they have difficulty in understanding it because of its language version. In addition, the accounting department should also find a way to increase the language ability of the students and keep it as part of the curriculum.

The results of this study also identified the limitations of the sample. The sample should be those who in their daily operational activities use the technology to support their job, this is in relation to having the real interest and intensity of technology usage. Furthermore, for the next study, we will not only analyse the perception of usefulness and ease of use of a technology, but many other determinants that can be extracted, such as demographic factors (gender, experience or education) or by intrinsic and extrinsic motivation of the user that can be further analysed to determine attitudes and interests of user behaviour in using technology.

REFERENCES

Adams, D.A., Nelson, R.R. & Todd, P.A. 1992. Perceived usefulness, ease of use, and usage of information technology: a replication. *MIS Quarterly* 16(2): 227-247.

Agarwal, R. & Prasad, J. 1997. The role of innovation characteristics and perceived voluntariness in the acceptance of information technologies. *Decision Sciences* 28(3): 557-582.

Ajzen, I. 1985. From intentions to actions: A theory of planned behaviour. In *Action Control: From Cognition to Behavior*, edited by J. Kuhl and J. Beckmann, 11-39. New York: Springer-Verlag.

Bodnar, H., George & Hopwood, S. 1995. *Accounting Information System, the Indonesian Edition*. Jakarta: Publisher Salemba Empat.

Browne, M.W. & Cudeck, R. 1993. Alternative ways of assessing model fit. In *Testing Structural Equation Models*, edited by Bollen, K. & Long, J, 136-162. Newbury Park, CA: Sage.

Chau, P.Y.K. 2001. Influence of computer attitude and self-efficacy on IT usage behavior. *Journal of End User Computing* 13(1): 26-33.

Chin, W.W. & Todd, P.A. 1995. On the use, usefulness, and ease of structural equation modeling in MIS research: A note of caution. *MIS Quarterly* 19(2): 237-246.

Christina, L. & Amoroso, D.L.G. 2004. Development of an Instrument to Measure the Acceptance of Internet Technology by Consumers,hicss, vol. 8, pp.80260c, Proceedings of the 37th Annual Hawaii International Conference on System Sciences (HICSS'04) - Track 8.

Davis, F.D. 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly* 13(3): 319-340.

Davis, F.D., Bagozzi, R.P. & Warsaw, P.R. 1989. User acceptance of computer technology: A comparison of two theoretical models. *Management Science* 35: 982-1003.

Ferguson, C. 1997. The effect of computer micro on the works of the professional accountant. *Accounting Journal* 37.

Fishbein, M. & Ajzen, I. 1980. *Understanding Attitudes and Predicting Social Behavior*. Englewood-Cliffs, NJ.: Prentice Hall.

Ghozali, Imam. 2005. *Structural Equation Models, Theories, Concepts and Applications with 8:54 LISREL Programs*. Publisher BP Undip.

Hair, J., Anderson, R., Tatham, R. & Black, W. 1998. *Multivariate Data Analysis*. 5th edition. Upper Saddle River, NJ: Prentice Hall.

Hu, P.J., Cahau, P.Y.K., Sheng, O.R.L., Tam, K.Y. 1999. Examining the technology acceptance model using physician acceptance of telemedicine technology. *Journal of Management Information Systems* 91-112.

Hong, W., Thong, J.Y.L., Wong, W.M. & Tam, K.Y. 2000. Determinants of user acceptance of digital libraries: An empirical examination of individual differences and systems characteristics. *Journal of Management Information Systems* 18(3); 97.

Igbaria, M., Guimaraes, T. & Davis, G.B. 1995. Testing the determinants of Microcomputer Usage via a Structural Equation Model. *Journal of Management Information Systems* 11 (4): 87-114.

Igbaria, M., Zinatelli, N., Cragg, P. & Cavaye, L.M. 1997. Personal computing acceptance factors in small firms: A structural equation model. *MIS Quarterly* 21(3): 279-302.

Iman, M., Ida, A. & Septi, M. 2008. Prediction of Students Confidence about Studentsite facility benefit with the Technology Acceptance Model Approach. National Seminar on Information Technology, Yogyakarta

Indriantoro, Nur & Supomo. 2002. *Business Research Methods*. Yogyakarta: BPFE

Indriantoro, Nur. 2000. The Effect of Computer Anxiety on faculty expertise in computer use. *Journal of Accounting and Auditing (JAAI)* 4(2).

Jackson, C.M., Chow, S. & Leitch, R.A. 1997. Toward an understanding of the behavioral intention to use an information system. *Journal of Decision Sciences* 28(2): 357-389

Jantan, T.R. & Chin, W.W. 2001. Personal computer acceptance by small and medium sized companies evidences from Malaysia. *Journal of Management and Business* 1(3).

Jogiyanto. 2007. *Keprilakuan Information System*. Andi: Jogyakarta

Lee, Y., Kozar, K.A. & Larsen, K.R.T. 2003. *The technology acceptance model: Past, present, and future*. Communications of the Association for Information Systems 12(50): 752-780

Morris, M. & Dillon, A. 1997. How user perceptions influence software use. *IEEE Software* 14(4): 58-65

Nasution, F. 2006. *Information Technology Based Behavior Aspect*. USU Digital Library, http://library.usu.ac.id (retrieved March 17, 2009).

Nelvia, D. & Harahap, R.M. 2009. Study on user behavior of BPKP Wide Area Network (WAN) services. *Internetworking Indonesia Journal* 1(1): 25-28.

Sham, F.B.Z. 1999. Impact of technology complexity of information for strategy and business continuity. *Journal of Accounting and Auditing* (JAAI) 3(1).

Shin, N. & Edington, B.H. 2007 An integrative framework for contextual factors affecting implementation of information technology. *Journal of Information Technology Theory and Application (JITTA)* 8(4): 21-38.

Steiger, J.H. 1989. *Causal Modeling: A Supplementary Module for SYSTAT and SYGRAPH*. *SYSTAT*. Evanston, IL.

Tangke, N. 2004. *Acceptance Analysis of TABK Implementation Using TAM on BPK-RI*. http://puslit.petra.ac.id (retrieved December 2, 2009)

Taylor, S. & Todd, P.A. 1995. Understanding information technology usage: A test of competing models. *Information Systems Research* 6(4): 144-176.

Teo, T., Su Luan, W. & Sing, C.C. 2008. *A cross-cultural examination of the intention to use technology Between Singaporean and Malaysian pre-service Teachers: an application of the Technology Acceptance Model (TAM* Educational Technology and Society 11(4): 265-280.

Trisnawati, R. 1998. Consideration of Behavior and Critical Success Factors of Information System Development. Kajian Bisnis. No. May 14-September. Pp. 77-86.

Venkatesh, V. & Davis, F.D. 2000. A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science* 46: 186-204.

Venkatesh, V. & Morris, M.G. 2000. Age differences in technology adoption decisions: Implications for a changing workforce. *Personnel Psychology* 53(2): 375-403.

Wibowo, A. 2008. *Study on Users Attitudes of Information Systems with Technology Acceptance Model (TAM) Approach*. http://bl.ac.id (retrieved February 27, 2009)

Yogesh Malhotra & Galletta, D.F. 1999. Extending the Technology Acceptance Model to Account for Social Influence: Theoretical Bases and Empirical Validation, hicss, vol. 1, pp.1006, Thirty-Second Annual Hawaii International Conference on System Sciences-Volume 1.

Zahra, E. 2009. *The Effect of information Quality, Individual Capability and Subjective Norms on Student Interest in Using the Internet as a Reader Source*. Paper presented at the SNA XII, Palembang.

Sriwidharmanely*
Vina Syafrudin
Accounting Department of Economics Faculty
Bengkulu University

*Corresponding author; email: nelybachsin@yahoo.co.id

APPENDIX 1

RESEARCH QUESTIONERS

Instructions:
- **In part I, please fill in the respondents' identity in the available space.**
- **In part II, please fill in every question about respondents' background in using the Accounting software.**
- **In part III, please choose the answer as you perceive based on your opinion that you:**

1)	**Strongly disagree**	4)	**agree**
2)	**disagree**	5)	**strongly agree**
3)	**neutral**		

Part I
Name   : ……………………………………
Sex   : ( ) Male   ( ) Female
Education level : ( ) D1   ( ) D2   ( ) D3   ( ) S1
Semester   :
PC that you have : ( ) PC   ( ) Laptop/Netbook

Part II
1. Subjects you have taken:
    () Accounting Systems () Accounting Information Systems
2. In addition to the above subject, is there any other subject that include accounting software:
    () Yes, Please list .... () No
3. Types of Accounting Software which you can operate:
    () MYOB Accounting () General Ledger () Peachtree
    () Accurate Accounting () Zahir Accounting () DacEasy Accounting
    () Other, Specify ... ...
4.   What Accounting Software language Version do you prefer to use:
    () English () Indonesian
5.   Expertise gained from what to operate the Accounting Software:
    () Training () Tutorial () Regular Course

Part III

a. **Perceived Ease of Use (PEOU).**

    1. Accounting Software can be accessed easily from outside the campus (eg from home)
    2. Accounting software can be easily accessed through the campus facilities (eg computer labs)
    3. The Accounting Software is easy to learn
    4. The composition of the menu on Accounting Software is easy to understand
    5. Facilities/features of the Accounting Software is easy to use
    6. Ease of use Accounting Software accelerates the courses' work/task

b. **Perceived Usefulness (PU)**

    7. Use of Accounting Software minimizes the loss of information in accounting tasks
    8. Use of Accounting Software increases my effectiveness in doing accounting tasks
    9. Use of Accounting Software improves my performance
    10. Accounting Software allows me to do the Accounting tasks more easily
    11. The Accounting Software that I use is very beneficial for me as a student
    12. The Accounting Software that I use helps me complete Accounting tasks more quickly

c. **Attitude towards Using (ATU)**

    13. I feel comfortable when using Accounting Software
    14. I received a log authorization model on Accounting Software for my account security
    15. I do not refuse to use Accounting Software
    16. Use of Accounting Software is not wasting my time

17. I am happy to use accounting software
18. I am not bored with the layout / interface Accounting Software

d. Behavioural Intention to Use (BITU)

19. I will install another Accounting Software to increase my ability.
20. I will install antivirus software in order to obtain safety data on Accounting Software
21. Although I have mastered another application, I will continue to use Accounting Software to enhance my ability
22. Although I have mastered another application, I will continue to use Accounting Software
23. I would recommend using Accounting Software to friends who have not used it before
24. I would invite friends to use Accounting Software

e. Actual System Usage (ASU)

25. I use Accounting Software during the days of courses, including holidays
26. In each practicum course in the lab, I use Accounting Software
27. I use Accounting Software almost every day
28. I am using Accounting Software for a minimum of 10 minutes, each time I use it
29. Overall, I am satisfied with the performance of Accounting Software
30. I am satisfied with the Accounting Software and tell other students

APPENDIX 2

PATH DIAGRAM
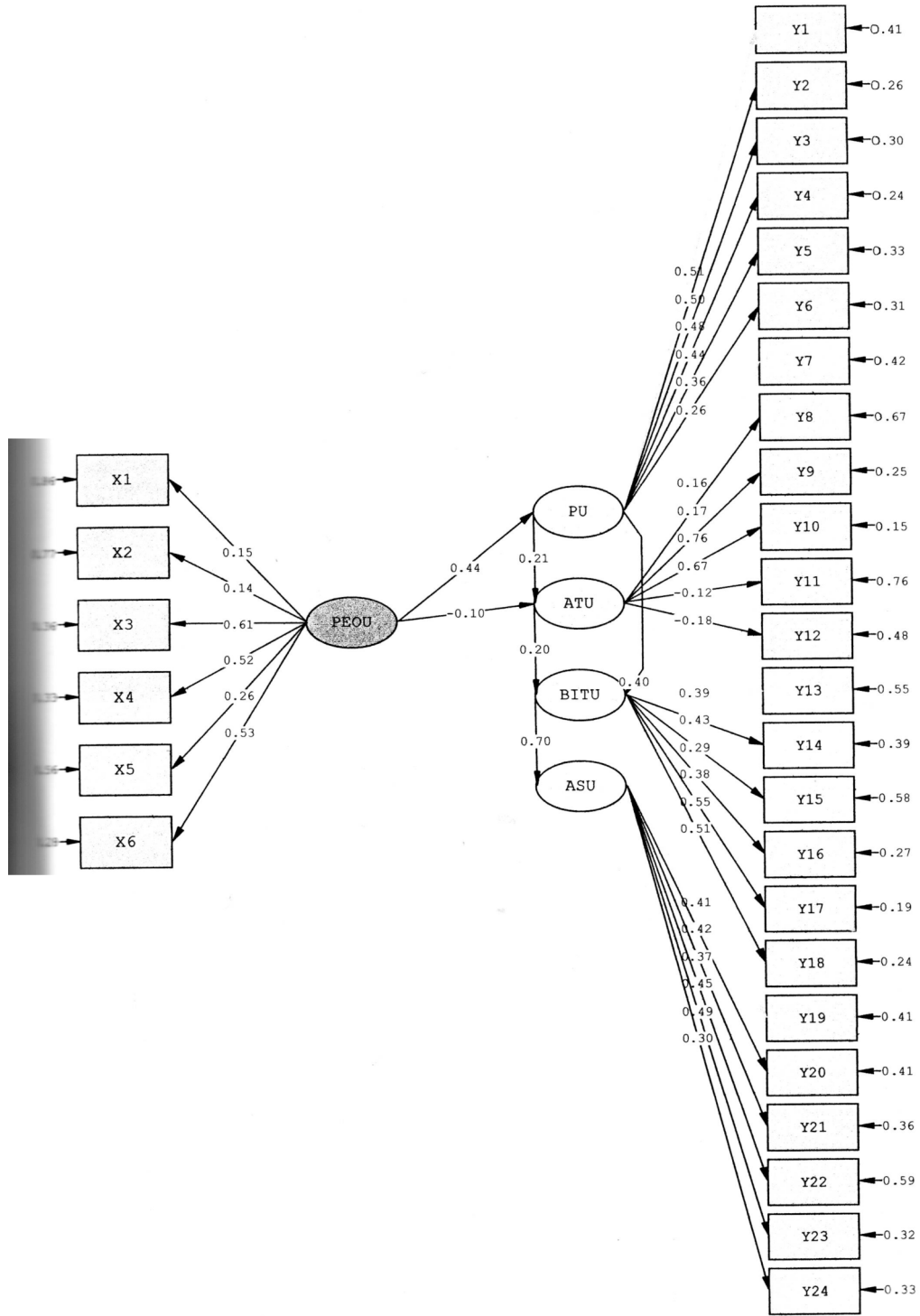
Chi-Square=1022.84, df=399, P-value=0.00000, RMSEA=0.099