



## Research Article

# The Effect of the Effectiveness of Accounting Information System and Use of Accounting Information Technology on Individual Performance with Computer User Expertise as a Moderating Variable (Survey on Cv. Mahli Baru Retailindo, Banda Aceh, Indonesia)

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**Abstract:** This study aims to examine the effect of the effectiveness of accounting information systems, the use of accounting information technology and the expertise of computer users together on individual performance. This study also aims to examine the effect of computer user expertise on the relationship between the effectiveness of accounting information systems and the use of accounting information technology with individual performance on CV. Mahli Baru Retailindo. The populations in this study were employees at CV. Mahli Baru Retailindo, which numbered 13 outlets in Banda Aceh City and Greater Aceh. In this study, the sources used are primary data and secondary data. Primary data obtained from the results of questionnaires answers to research respondents, while secondary data obtained from other documents. While the research data collection techniques are carried out by documentation techniques. The analytical method used is Multiple Linear Regression Analysis. The results showed that the effectiveness of accounting information systems, the use of accounting information technology and computer user expertise both jointly and separately had an effect on individual performance on the CV. Mahli Baru Retailindo. The next results show that computer user expertise influences the relationship between the effectiveness of accounting information systems and the use of accounting information technology with individual performance on CV. Mahli Baru Retailindo).

**Keywords:** Individual Performance, Effectiveness of Accounting Information Systems, Use of Accounting Information Technology, Computer User Expertise.

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## INTRODUCTION

The current era of globalization has resulted in increasingly rapid technological developments. This of course results in increasing competition in the business world. The superiority of competitiveness that can be created by a company can be achieved in one way, namely to improve its individual performance. Improving individual performance in a company certainly cannot only be influenced by one factor. There are other factors that influence it, one of which is the understanding of information systems and the use of technology (Parjanti, Hendra and Nurlela, 2014).

The technological developments that occur today are very rapidly developing

compared to the past. The development of data processing is one of the influences of the communication technology. The development of information systems is very important because Accounting Information Systems (SIA) are computerized based applications that process corporate data into information systems that are useful for decision making to solve problems faced by companies (Srimindarti and Puspitasari, 2010).

Problems related to individual performance were also felt in one of the business organizations in Aceh, namely CV. Mahli Baru Retailindo. With the rapid growth of transactions that demand a lot of CV. Mahli Baru Retailindo uses an integrated system in every Point of Sales (POS) cashier in all outlets. The system currently available includes sales,

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inventory, and receipt of goods. The technology at the POS cashier has also been designed in such a way as to meet the future development of transactions. However, this can be a problem because not all employees who work at CV. Mahli Baru Retailindo understands available information systems and there are still many employees who cannot use technology, such as computers. This of course can reduce individual performance.

Romney and Steinbart (2009) revealed that the implementation of technology-based accounting information systems in companies can provide user added value which ultimately has a positive impact on improving individual performance. For companies, work productivity is the main demand in order to maintain their survival or operations. Improvement of individual performance will not be achieved if the application of SIA is not in accordance with user needs. Accounting information systems are said to be effective if the information provided by the system can serve the needs of system users (Sajady and Dastgir, 2008).

Based on the previous description, it can be estimated that the factors that influence individual performance are the effectiveness of accounting information systems, the use of accounting information technology and the expertise of computer users. The reason for using these three variables is based on several previous studies that have used these three variables to assess their influence on individual performance. Effectiveness of accounting information systems (Suratini, Sinarwati and Atmadja, 2015; Mercika and Jati, 2015; Antasari and Yaniartha, 2015), the use of accounting information technology (Suratini, Sinarwati and Atmadja, 2015; Lindawati and Salamah, 2012; Antasari and Yaniartha, 2015 ) and computer user expertise (Raharjo, 2015; Pratama and Suardhika, 2013; Seftriadi, 2008).

This research is expected to be a consideration that computer user expertise and the factors that influence individual performance which include the effectiveness of accounting information systems and the use of accounting information technology are important to be implemented in order to improve individual performance. So that it has a positive impact on the services provided by CV employees. Mahli Baru Retailindo to consumers so that the results can also be felt by the business.

The discussion begins with discussing literature studies related to the effectiveness of accounting information systems, the use of accounting information technology, computer user expertise and individual performance. Then proceed with explaining the research method used. After that, followed by a discussion of the findings of the research, and finally this study provides some conclusions and suggestions for the parties concerned.

## LITERATURE REVIEW

### Individual Performance

Lindawati and Salamah (2012) define individual performance in an organization as the answer to the success or failure of a predetermined organizational goal. Bosses or managers often don't pay attention, unless it's very bad or everything goes awry. Too often managers don't know how bad performance is, so companies / agencies face a serious crisis ...

### Effectiveness of Accounting Information Systems

Achieving the effectiveness of an information system will depend on how the information system is operated and the ease of the system for its users. The effectiveness of implementing an information system in a company can be seen from the ease of users in identifying data, accessing data and interpreting the data (Sari and Ratma, 2009). Besides this, the success of using the system can be achieved by fulfilling the requirements of the system users themselves, so that the effectiveness of the SIA can be obtained (Alrabei, 2014).

### Use of Accounting Information Technology

Information Technology Association of American (ITAA) in Sutarman (2009: 3) defines information technology as a study, design, development, implementation, support or management of computer-based information systems, especially software applications and computer hardware. Information technology utilizes electronic computers and software to change, store, protect, process, transmit and obtain information securely.

### Computer User Skills

Financing to Deposit Ratio (FDR) is the ratio between the total amount of financing provided by banks and funds received by banks (Dendawijaya, 2009: 116). According to Kasmir (2008: 290), FDR is a ratio to measure the composition of the amount of financing provided compared to the amount of public funds and own capital used.

## RESEARCH METHOD

The population in this study were employees at CV. Mahli Baru Retailindo, which numbered 13 outlets in Banda Aceh City and Greater Aceh. Research respondents were assigned 4 people from each outlet, so the number of respondents was 52 respondents. The chosen respondents are employees who use accounting information system technology in carrying out their duties. The reason for choosing the respondent is also because those who are directly responsible for operating the system are applied.

In this study, the sources used are primary data and secondary data. Primary data is obtained from the results of the questionnaire answers to research respondents, while secondary data is obtained from online media news documents, government regulations, articles and journals. In this study, data collection techniques were carried out by documentation techniques.

Operationalization of variables in this study can be described as follows; In this study the dependent variable is individual performance. According to Engko (2006) individual performance is the level of achievement or work results of a person from the goals to be achieved or tasks that must be carried out within a certain period of time. An individual performance indicators based on Sedarmayanti (2007) which include; work performance, expertise, behavior and leadership. The measuring instrument used is the interval scale in the form of a 5-point Likert scale.

In this study the independent variables are: the effectiveness of accounting information systems and the use of information technology. The definitions of each independent variable in this study are:

Effectiveness of accounting information systems ( $X_1$ ). According to Sierrawati and Damayanthi (2012) is a measure that provides an overview of the extent to which targets can be achieved from a set of regulated resources to collect, process and store electronic data, then convert it into useful information and provide well-needed formal reports. Indicator of the effectiveness of accounting information systems based on Cushing (2009: 990) which includes; Useful, Economy, Reability (Andal), Customer Service, Capacity, Simplicity, and Flexibility. The measuring instrument used is the interval scale in the form of a 5-point Likert scale.

Use of accounting information technology ( $X_2$ ). According to Celviana and Rahmawati (2010), an activity that includes data processing, information processing, management systems and work processes electronically and the use of information technology advancements so that public services can be accessed easily and cheaply by people throughout the country. Indicators of the use of accounting information

technology based on Celviana and Rahmawati (2010) which include; devices, financial data management, and maintenance. The measuring instrument used is the interval scale in the form of a 5-point Likert scale.

The moderating variable in this study is the expertise of computer users. According to Indriantoro (1999) one's computer skills are defined as the ability to use computer applications, operating systems, handling files and hardware, storing data and using keyboard keys. The indicators used are based on Compeau and Higgins (1995) which include; magnitude, strength, and generalibility. The measuring instrument used is the interval scale in the form of a 5-point Likert scale.

The research data were analyzed using two models, namely multiple linear regression analysis, and the second used moderation regression analysis, namely the interaction regression model or Moderate Regression Analysis (MRA). Multiple linear regression analysis is used to analyze the effect of independent variables (the effectiveness of accounting information systems and the use of accounting information technology) on the dependent variable (individual performance). While the moderating regression analysis aims to determine whether the moderating variable (computer user expertise) will strengthen or weaken the relationship between the independent variable and the dependent variable. Data is processed using the SPSS assistance program (Statistical Package for Social Sciences) Version 18.

## RESULTS

### General Description of Research Observation

The unit of analysis of this study is employees at CV. Mahli Baru Retailindo, amounting to 52 people. Research respondents are employees who use accounting information system technology in carrying out their duties. A total of 52 questionnaires were distributed to research respondents in 13 outlets owned by CV. Mahli Baru Retailindo returned entirely, meaning the questionnaire returned 100% to be processed. The location of this study was conducted in the Banda Aceh City and Aceh Besar District neighborhoods.

### Descriptive Analysis

Descriptive analysis for each variable in this study was obtained based on a questionnaire filled out by respondents to individual performance variables ( $Y$ ), effectiveness of accounting information systems ( $X_1$ ), use of accounting information technology ( $X_2$ ), and computer user expertise ( $X_3$ ). Processing data using SPSS (Statistical Package for Social Science) software version 20 and Microsoft Excel 2010. Descriptive statistics are useful to provide an overview or description of the variables used in this study. The

following is presented the value of descriptive statistics of each research variable in Table 1.

**Table 1.** Descriptive statistics

	Jumlah Populasi/darta	Mean	Minimum	Maksimum
Effectiveness of accounting information systems (X <sub>1</sub> )	52	4,14	3,14	5,00
Use of accounting information technology (X <sub>2</sub> )	52	4,37	3,83	5,00
Computer user expertise (X <sub>3</sub> )	52	4,11	3,17	5,00
Individual performance (Y)	52	4,17	3,38	4,88

Data Source: Financial Statements of Islamic Banks in Indonesia, processed (2018).

### Hypothesis Testing Results

Hypothesis testing is done to test and analyze the hypothesis formulation using multiple linear regression models and interaction regression or Moderate Regression Analysis (MRA). Regression testing results for independent variables

(effectiveness of SIA and use of accounting information technology) on the dependent variable (individual performance) with moderating variables (computer user expertise) can be seen in Table 2.

**Table 2.** Test Results with Multiple Linear Regression Model and Interaction Regression Analysis (MRA)

Variable	Multiple Linear Regression (Without Moderating Variables)	Regression Interaction or Moderate Regression Analysis (With Moderating Variables)
	B (Regression Coefficient)	B (Regression Coefficient)
Constanta	0,268	-0,309
Effectiveness of accounting information systems (x <sub>1</sub> )	0,100	0,109
Use of accounting information technology (x <sub>2</sub> )	0,139	0,261
Computer user expertise (x <sub>3</sub> )	0,700	0,846
X <sub>1</sub> .X <sub>3</sub>	-	-0,003
X <sub>2</sub> .X <sub>3</sub>	-	-0,030
R	0,887	0,887
R <sup>2</sup>	0,787	0,788

## DISCUSSIONS

### Effect of Accounting Information System Effectiveness on Individual Performance

The results of the study indicate that the effectiveness of AIS affects individual performance. Regression coefficient (β<sub>1</sub>) obtained at 0.100 indicates that every increase in the effectiveness of SIA is 1 unit of interval scale then it will be followed by an increase in individual performance of 0.100 units of interval scale. Positive relationship between effectiveness of AIS and individual performance was obtained. This means that the higher the level of effectiveness of the use of SIA, the better the individual performance on the CV. Mahli Baru Retailindo.

The results of this study are in accordance with the results of research conducted by Suratini, Sinarwati and Atmadja (2015), Mercika and Jati (2015), Antasari and Yaniartha (2015). Their research proves that the effectiveness of accounting information systems has a positive effect on individual performance.

### Effect of Information Technology Usage Accounting on Individual Performance

The results showed that the use of accounting information technology had an effect on individual performance. Regression coefficient (β<sub>2</sub>) obtained at 0.139 indicates that each increase in the use of accounting information technology by 1 unit interval scale will be followed by an increase in individual performance of 0.139 units of the interval scale. A positive relationship was obtained using

accounting information technology with individual performance. This means that with the better accounting information technology used in carrying out business transactions, the individual performance will be better on the CV. Mahli Baru Retailindo.

The results of this study are also in line with the results of the research of Suratini, Sinarwati and Atmadja (2015), Lindawati and Salamah (2012), Antasari and Yaniartha (2015). Their results prove that the use of accounting information technology has a positive effect on individual performance.

#### **Effect of Computer User Skills on Individual Performance**

The results of the study show that computer user expertise influences individual performance. The regression coefficient ( $\beta_3$ ) obtained at 0.700 indicates that each increase in computer user expertise is 1 unit interval scale, followed by an increase in individual performance of 0.700 interval scale units. Positive relationship between computer user expertise and individual performance was obtained. This means that the more skilled CV employees. Mahli Baru Retailindo uses computers in its work, so the better individual performance on CV. Mahli Baru Retailindo.

The results of this study are consistent with the results of the research of Raharjo (2015), Pratama and Suardhika (2013), Seftriadi (2008), Wirjono (2010), Faisal (2011), and Septyanintyas (2010). Their results prove that computer user expertise has a positive effect on individual performance.

#### **The Effect of Computer User Skills on the Relationship between the Effectiveness of Accounting Information Systems and Individual Performance**

The results of the study show that computer user expertise succeeds as a moderating variable or strengthens the relationship between the effectiveness of AIS to individual performance. These results indicate that the increasing expertise of computer users, can increase the effect of the effectiveness of AIS on individual performance on the CV. Mahli Baru Retailindo.

The results of this study are not appropriate or not in line with the results of research conducted by Pratama and Suardhika (2013). The results of his research show that the increasing expertise of computer users is not able to increase the influence of the level of effectiveness of accounting information systems on employee performance. This is because most respondents

have less experience in computer use, so that computer user expertise cannot strengthen the relationship between the effectiveness of accounting information systems on employee performance.

#### **Effect of Computer User Skills on the Relationship between the Use of Accounting Information Technology and Individual Performance**

The results showed that the expertise of computer users succeeded as a moderating variable or strengthened the relationship between the use of accounting information technology to individual performance. These results indicate that the increasing expertise of computer users, can increase the influence of the use of accounting information technology on individual performance on the CV. Mahli Baru Retailindo.

Researchers have not found the results of previous studies that discussed the influence of computer user expertise on the relationship of the use of accounting information technology to employee performance, so that the results of this study are very useful in making a positive contribution to the company in terms of decision-making or policy in improving individual employee performance.

## **CONCLUSIONS AND SUGGESTIONS**

The effectiveness of accounting information systems, the use of accounting information technology and the expertise of computer users together affect the individual performance of the CV. Mahli Baru Retailindo. The effectiveness of the accounting information system itself affects individual performance on the CV. Mahli Baru Retailindo. The use of accounting information technology itself affects individual performance on the CV. Mahli Baru Retailindo. The expertise of computer users themselves affects individual performance on the CV. Mahli Baru Retailindo. Computer user expertise influences the relationship between the effectiveness of accounting information systems and individual performance on CV. Mahli Baru Retailindo. Computer user expertise influences the relationship between the use of accounting information technology and individual performance on CV. Mahli Baru Retailindo.

Advice for business organizations, to pay attention to factors that affect individual performance. It is also recommended to always improve the effectiveness of accounting information systems so that later able to encourage individual performance to be better, always updating information technology so that it can be utilized as well as possible to improve individual performance.

Education and training also need to be given by employers to their employees so that their performance increases which indirectly also increases company profits. Future research is expected to expand the object of research not only in one business, but better if done in various types of businesses, as well as in different regions.

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