

# **The Influence of Information Technology and Training and User Education On the Effectiveness of Accounting Information Systems in Commercial Banks in the Republic of Yemen**

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## **Abstract**

This study explores accounting information systems effectiveness and its influence factors in t commercial banks working in the Republic of Yemen. The intended model explores the impact of information technology and training and user education on accounting information systems effectiveness. This study included all main commercial bakes in the Republic of Yemen and its branches in the Sana'a for testing the model. The results show that information technology and training and user education significantly contributed to AIS effectiveness. On the whole, this study recommends that the necessity for Yemeni universities to increase interest in teaching accounting information systems as well as information technology in relation to networks, databases, and programming due to its close relationship with accounting, the necessity of coordination between commercial banks in Yemen and academic and banking institutions to provide training and educational programs appropriate for individuals working in the department of accounting information systems, and the need to involve commercial banks with designing university programs, especially in the bachelor of accounting and information technology to ensure that their application needs are included in those programs, and the network of AIS must be properly secured with firewall and intrusion detection systems in Yemen commercial banks, as well as uses of modern computer equipment and advanced software must be expanded, as it has a positive impact in raising the effectiveness of accounting information systems.

**Keywords:** Information Technology, Training and User Education, and Accounting Information Systems Effectiveness

## 1. INTRODUCTION

Information technology with its advanced tools is fundamental, and nothing has affected human life since the industrial revolution, just as it affected information technology, which has become indispensable to the lives of people, countries and institutions, so what is witnessing the world is an accelerated technical transformation and successive developments in the field of computers, software, communications devices and their means the various factors contributed significantly to the occurrence of radical changes in multiple areas and fields, the most prominent of which is the economic field that has shifted from a traditional economy dependent on the exchange of goods and goods to a knowledge economy in which information represents the main factor determining the institution's survival in the local or global competition environment. Therefore, information is the product of processing and running raw data through accounting information systems, and information has become an important tool for economic institutions that depend on them in the process of making decisions and facing current and future changes and challenges that threaten their success and continuity.

In light of the economic institutions endeavoring to keep abreast of new, continuous and rapid developments occurring in the surrounding environment, and the widespread application of the principles of governance and the application of new international accounting standards for the preparation of financial reports, economic institutions of various types and sizes have tended to develop and modernize their information systems, and the most important is the accounting information system, which is considered a strategic operation in the organization, and this is because it provides other functions with the information that it needs, through the use of information technology to improve the performance of the accounting information system and increase its effectiveness and efficiency so that it can store and process a vast amount of data in a fast manner at the lowest cost And the production of accounting information with excellent characteristics and communicating it to its users in order to help them make sound decisions, and Yemeni commercial banks are among the institutions that have employed information technology and training their users to develop their accounting information systems outcomes.

## 2. STATEMENT OF THE PROBLEM

In order to provide the required information from the various relevant authorities needs exceptional efforts by the economic units, as providing the required information at a lower cost and in appropriate time contributes to the right decision-making process, in light of the intense competition between economic units, especially banking sector, and the world has become aware of the fact that owning information by the economic units and submitting it to its users is one of the most critical challenges facing those economic units. Therefore, this study attempts to highlight the impact of information technology and training and users education on the effectiveness of accounting information systems by raising the following influential problems;

1. What is the impact of the information technology on the effectiveness of accounting information systems in commercial banks in the Republic of Yemen?
2. What is the impact of training and users education on the effectiveness of accounting information systems in commercial banks in the Republic of Yemen?
3. What is the impact of information technology and training and users education together on the effectiveness of accounting information systems in commercial banks in the Republic of Yemen?

### 3. OBJECTIVES OF THE STUDY

This study sights to know:

1. To evaluate the influencing of information technology on the effectiveness of accounting information systems in commercial banks in the Republic of Yemen.
2. To appraise the influencing training and user education on the effectiveness of accounting information systems in commercial banks in the Republic of Yemen.

### 4. IMPORTANCE OF THE STUDY

In light of the knowledge and information openness that the world is witnessing today, the accounting information has an important and active role in banking activity. The expansion of banking transactions, whether at the local or international level, made the provision of accounting information with high flexibility and low-cost very powerful. In order to achieve this goal, the Yemeni banking sector seeks to build a dependable accounting information system that provides the required information to the various relevant authorities, whether the higher administrators or external parties dealing with the banking sector, which contributes to the process of investments and administrative decision-making in a manner that reflects the best performance. In light of the foregoing, the significance of this study lies in assessing the factors that influence the effectiveness of accounting information systems in commercial banks in the Republic of Yemen, which it may affect the efficiency and effectiveness of the outputs of those systems .

### 5. RESEARCH MODEL

The supposed research model is exposed that two variables are hypothesized to have a positive relationship with accounting information systems effectiveness: Information Technology ( $X_1$ ), Training and User Education ( $X_2$ ), and the dependent variable is AIS Effectiveness ( $X_3$ ).

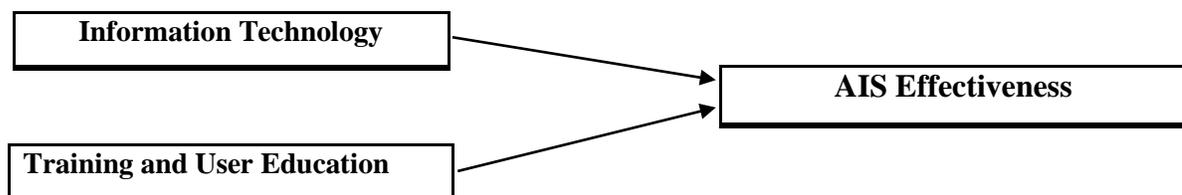


Figure 1: Research Model

## 6. HYPOTHESES OF THE STUDY

Based upon the above model, following hypotheses are formulated:

**H1:** There is no statistically significant relationship between information technology and accounting information systems effectiveness applied in the commercial banks in the Republic of Yemen.

**H2:** There is no statistically significant relationship between training and user education and accounting information systems effectiveness applied in the commercial banks in the Republic of Yemen.

**H3:** There is no statistically significant relationship between information technology and training and user education together and accounting information systems effectiveness in the commercial banks in the Republic of Yemen.

## 7. METHODOLOGY OF THE STUDY

The study has mainly used a descriptive method of survey supported by theoretical groundings to assess the factors that influencing the effectiveness of accounting information systems in commercial banks in the Republic of Yemen namely: information technology and training and user education. This study is carried out depend on both primary data and secondary data. The source of primary data of the study was collected from a questionnaires administrated to covers all dimensions of the study as well as a web-based link distributed to the various groups of respondents selected in the banks, regarding their perceptions of the accounting information systems effectiveness in the commercial banks in the Republic of Yemen.

The sample of this study is drawn from all main commercial banks in the Republic of Yemen and its branches in Sana'a. It comprised of executive managers, financial managers, account managers, accountants, and auditors who are related to the accounting information systems in commercial banks in the Republic of Yemen. Therefore, this study collects data from all main commercial banks in Yemen and its branches in Sana'a, through distributed questionnaires equally to each of the selected banks. Out of 340 questionnaires, I received 272 responses which used for data analysis.

The questionnaire was designed such that the required data could be collected from different groups of respondents in the commercial banks' sector in Yemen. Its design was done in harmony with the already existing methods mentioned in the preceding literature review in this area of research, and adequate attention has been given to the advantage and drawbacks of each method for the possibility of conducting the research within the study area. Five points Likert scale has been used which ranging from strongly agree to strongly disagree to manage the questionnaire and collect the required data, for the reason of, its multiple options allowing respondents to choose between them and to avoid possible constraints by respondents in order to increase the level of accuracy of the responses required, and information technology (IT) is measured by 11 items, and training and user education (T&E) is measured by 9 items, and effectiveness of accounting information systems (AIS) measured by taking the update model of DeLone and McLean (2003). This study uses SPSS package for producing the frequency distribution, Cronbach Alfa values, as well as for testing hypotheses of the study.

## 8. Review of the Literature

### 8.1. Information Technology

In Vietnam, Quang Binh Taa, and Thi Thuan Nguyenb (2020), this research focused on the influence of information technology on the quality of accounting information systems in civil engineering construction enterprises in Vietnam and its impact on firm performance. The current research used a questionnaire method to gather data through distributing 710 questionnaires to the respondents selected such as directors, deputy directors, chief accountants, accountants, internal controllers, internal auditors of construction civil engineering enterprise. The contributors investigated the data gathered through using both of SPSS and AMOS software to prove the relationship between information technology and management commitment factors and accounting information system quality are statistically significant. The outcomes of the study prove a positive relationship between the factors information technology; management commitment on the quality of accounting information system and it has a positive influence on firm performance. Consequently, the outcomes reveal that the stated hypotheses in the theoretical research framework were approved.

In Indonesia, Hasibuan (2020) this investigation sights to get empirical proof regarding the influence of accounting information systems effectiveness, information technology utilization, and task fit on employee performance with job satisfaction as moderation variables. the population of this research were 178 employees who running on accounting information systems and information technology. this study used a census sampling method. this investigation used multiple linear regression analysis by using E-Views software to process the data of the study. This study figure out that the information technology utilization has a significant effect on performance and refers that accounting information systems effectiveness and task fit have no significant effect on Performance.

Yaeshee et al. (2017), this study aimed to demonstrate the importance of the accounting information system, identifying the components of information technology, highlighting the role that information technology plays in increasing the effectiveness and efficiency of the accounting information system, and examining the reality of the use of distribution managers in the roles of information technology in improving their information system. This study used the descriptive approach in the theoretical side, and the analytical approach to analyze the data of the study collected through the distribution of questionnaire forms to the sample study, which consists of a group of the works of the Directorate of Electricity and Gas Distribution in Adrar. This study concluded that information technology is the use of computer technology, and modern communication technology to collect, store, process, and retrieve information and send it to its users in the form of digital data, text, forms, sound and images. The use of information technology in the accounting information system leads to a reduction in time and speed in completing business, and the exchange of information of high quality and less cost. The contribution of information technology was increasing the ability of accounting information systems to adapt and rapidly adapt to the work environment in the economic unit.

### 8.2. Training and User Education

In Indonesia, Meiryani et. al (2020), they conducted research on the subject of the influence of user training and information system development formalization on accounting information system performance in companies. The purpose of this investigation was to estimate the influence of user training, formalization of information system development on accounting information system performance. This study used both of descriptive and verification research methods and questionnaire for gathering required data which will be use for analysis. This study employed purposive sampling for selecting the

respondents of the study. Based on the multiple linear regression analysis with Rstudio software used the result of this study pointed out that the user training has no impact on accounting information systems performance. The formalizing the development of information systems has no impact on the accounting information system's performance. The user training and formalization of the development of information systems simultaneously influence the performance of accounting information systems.

Rina Dian Agustin et.al (2020), in this research the researchers attempted to a determinant of accounting information system in PT Indomarco Adi prima in Indonesia through examined the effect of education and training program and other factors such as competence of human resources on the accounting information systems quality at PT Indomarco Adi prima in Indonesia. This research used a questionnaire to collect data, that distributed it to the employees who were working on information systems at PT. Indomarco Adi Prima Jember Branch. And via a purposive sampling method, they were selected. This research employed validity and reliability, multicollinearity tests, and multiple regression for analyzing the gathered data. This research figured out that the education and training program factor significantly impacted the accounting information systems quality at PT. Indomarco Adi Prima Jember Branch and other factors have significantly impacted the accounting information systems quality such as competence of human resources. As well as the coefficient of determination ( $R^2$ ) of all independent variables in the current research greatly defined the dependent variable.

In Mexico, Medina et. al (2014), the core aimed of the study was to study the relationship between training in the use of accounting information systems and their impact on the users of accounting information systems and the decision-making process. The data required for this study were collected through a questionnaire designed for this purpose, and a five Likert point model was used. The questionnaire was distributed to a sample of the study, which was represented by 63 small and medium-sized companies in Mexico. The sample of the study was represented by people who use accounting information systems such as financial managers, accountants, and top managers. In the analytical aspect of this study, the data gathered analysis by adopting descriptive statistics as well as Smart PLS software package. The result of the study pointed out that there is an important role of training to get hold of satisfaction and raise more and better decisions that aid the benefit of respondents and their companies.

## 9. Accounting information systems

There have been many studies that dealt with the concept of accounting information systems, which including the study of Al-Dalahmeh (2014), which defined accounting information systems as a computerized plan that relies on a number of rules and principles, documents, records, reports and instructions that must be followed, to control the measurement process, and to provide information in easy and useful ways to those interested in business and activities of the organization. Likewise, it was defined by Fitriati & Mulyani (2005) as a set of methods and procedures intended to address economic events that affect the operations of the organization and its financial position, and to present it in the form of reports to users. Similarly, Rapina (2015) also believes that accounting information systems are the process of preparing accounting information reliably, as a primary resource for decision makers.

Consequently, some researchers specializing in accounting systems have indicated that an accounting information system is a collection of resources, components that are interlinked and designed to transform and process financial and non-financial data into useful information that helps decision-makers in improving the process of making and making sound decisions with a view to achieving several benefits related to financial aspects And business administration (Romney & Steinbart, 2016; Stair & Reynold, 2012). From the idea of achieving benefit in commercial environments (Romney &

Steinbart, 2016) believes that any accounting information system must be effective, this means that the accounting system is characterized by characteristics that distinguish it from other systems, and some researchers have identified it, such as Al-Hadidi et al. (2016), Romney & Steinbart (2016), Al-Rifai et al. (2009), and Heidmann (2008) are important characteristics that add value to an organization:

- **Integration:** means the extent to which the accounting information system can be adapted to the external environment surrounding the project, and the obligations imposed on management, accordingly the system designer takes into account the circumstances surrounding the user of accounting information to help him make decisions, as well as the ability of the accounting system to integrate with other subsystems that make up the information system Administrative, which brings the project to the stage of integration between the components of the system and the quality of its outputs.
- **Flexibility:** It is a feature that depends on the time and organization, as it contributes to providing information covering later periods, thus helping to improve the function of future planning, as well as helping to organize oversight according to the organizational structure of the organization, and thus helps in determining the tasks assigned to each of its members. As well as, the ability of the accounting information system to respond to the changes that occur in the organizational structure of the organization, as well as changes in the external environment and changes in the competitive environment.
- **User satisfaction:** the user is considered one of the most important parts of the accounting system that is directly related to the process of data flow, so this feature is concerned with analyzing the behavior of the system user, in addition to satisfying his desires and treatment as a human being not as part of the system parts.
- **Scientific method:** an information system is based on a scientific method, which meets its desired goals through mathematical models, logical equations and simulations that are used as scientific components, facilitating the provision of information that serves the process of prediction, comparison, and control, thus supporting decision-making.
- **Response:** Means the system's ability to respond to users of accounting information and the constant demand for accounting information, given that this system generates and stores information until it is requested.

## 10. Data Analysis and Testing of Hypothesis

### 10.1. Demography of the study

The results of the frequency pattern of the demographic portfolio are abstracted in the schedule below:

**Table 1. Demographic Profile of Study Respondents (N = 272)**

Demographics	Characteristic	Percentage
Gender Group	Male	76.8
	Female	23.2
	20-29 Years	14.3

<b>Age Group</b>	30-39 Years	65.1
	40-49 Years	19.1
	50 and above	1.5
<b>Educational Group</b>	Diploma	3.3
	Bachelor	89.0
	Master	7.7
<b>Professional Group</b>	Executive Managers	9.2
	Financial Managers	16.2
	Account Managers	14.3
	Accountants	39.3
	Auditors	21.0
<b>Experience Group</b>	Less than 10 Years	63.2
	11 – 20 Years	32.4
	Above 20 Years	4.4

Source: Field survey

As exposed in Table (1), the most important personality of the respondents are obtainable in a group of gender, age, educational level, professional level, and experience level. In terms of gender, the study respondents can be classified into 76.8 % as male and 23.2% as female and most of the participants which have ages between 30-39 were (65%). The majority of respondents of the study were a bachelor's degree (89%). According to professional level the majority of respondents in the study were accountants (39.3). As a final point, on the subject of experience, most of the respondents had less than 10 years of experience (63%).

### 10.2. Descriptive Statistics of the study

The findings of the descriptive statistics of the study are shown in the following table:

**TABLE 2**  
**Descriptive Statistics of the Study**

Variables of study	N	Mean	Std. Deviation
Information Technology	272	4.05	.740
Training and User Education	272	4.04	.699
Effectiveness of AIS	272	3.94	.681

Source: Field survey

Table 1 reviews the descriptive statistics for the main variables. The results demonstrate that respondents of commercial banks in the Republic of Yemen noticed their accounting information systems as fairly effective (mean = 3.94). Furthermore, the mean value of all the related statements of the information technology factor is (mean = 4.05) which corresponds to a high level of approval, and the standard deviation of this factor is (0.740) which indicates that there are agreement and harmony among the respondent's responses in this axis. Moreover, training and user education factor, wherein the mean value for all training and user education statements have occupied (mean= 4.04) which express great conformity of respondents concerning the role of training and user education on the accounting information systems effectiveness, with a standard deviation of (0.699) which explains the distribution of responses from the mean.

### 10.3. Reliability

The Cronbach alpha propose how well items in a set are optimistically interrelated with each other (Sekaran, 2003). The reliability of the study is always a big concern. For this reason, the Cronbach Alfa test is applied for testing the reliability of the data of the current study. Cronbach Alfa is a fit value when the reliability value between (1 to 0.6). Therefore, the value which will be above 0.6 is considered to be good and accepted and the value which is lesser than 0.6 is considered poor and rejected. The current study Cronbach Alfa value are 0.925, 0.942. and 0.962 which is highly reliable. Hence, the outcomes of the current research are reliable and can be publicize.

**TABLE 3**  
**Reliability Statistics of Study**

Variables	Cronbach's Alpha
Information Technology	.952
Training and User Education	.921
<b>AIS effectiveness</b>	.962

Source: Field survey

## 11. Testing of the Hypothesis of Study

### 11.1. Information Technology

Simple linear regression was carried to find out if the various factors such as (Information Technology and Training and User Education) have any significant impact on the effectiveness of accounting information systems applied in the commercial banks in the Republic of Yemen independently.

The model that is created for one independent variable for the prediction of the dependent variable can be expressed as

$$Y = B_0 + B_1X_1$$

The regression equation can be written as:

$$X_3 = P_1X_1 + P_2X_2 + R$$

**Whereas:**

$X_3$  = accounting information systems effectiveness;  $X_1$  = information technology;  $X_2$  = training and user education

In the regression equation, it handles overall accounting information systems effectiveness ( $X_3$ ) as the dependent variable, information technology ( $X_1$ ) training and user education ( $X_2$ ) as the independent variables. Table 4. Portrays the regression analysis.

**TABLE 4**  
**REGRESSION ANALYSIS FOR THE RELATIONSHIP BETWEEN INFORMATION TECHNOLOGY AND AIS EFFECTIVENESS**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<b>Constant</b>	48.954	5.272		9.286	.000
<b>Information Technology</b>	2.811	.117	.824	23.930	.000
<b>Adjusted R<sup>2</sup></b>	.678				
<b>R</b>	.824				
<b>F</b>	572.6				
<b>Significant</b>	.000				

Source: Field survey

The result obtained shows that, there is a positive relationship between information technology and accounting information systems in commercial banks in Yemen. Through reviewing table 4.28, it could be seen that  $\text{Sig} = 0.000 < 0.05$  and the value obtained in 572.6 at less than 0.05 level of significance, which was statistically significant.

On the opposite side, the information technology has a significant influence on the accounting information system effectiveness as a whole, and that information technology as an independent variable has explained 0.678 from the total variation of accounting information system effectiveness, as ( $R^2 = 0.678$ ). It has been found that there is a direct significant relation between information technology and accounting information system effectiveness, since ( $t = 23.930$ , P-value less than 0.05). This means that whenever the degree of information technology increases, the accounting information system effectiveness as a whole also increases vice versa.

From table could be seen the regression equation created in relation to one independent variable which can be expressed to predict the dependent variable as;

$$\text{AIS Effectiveness} = 48.954 + 2.811 (\text{Information Technology}).$$

The output of the regression model illustrates that the unstandardized coefficient (value) for information technology is 2.811 with a standard error of 0.117 and a significant value of .000. The insight is that one unit variation in the information technology results in 2.811 units of variation in the effectiveness of accounting information systems in commercial banks in the Republic of Yemen whether it appears in increasing or decreasing. More importantly, it could be seen from the previous table that the ( $t$  value = 23.930,  $p = .000$ ) and this points out that the predictor 'information technology' has positively affects with the effectiveness of accounting information systems in commercial banks in the Republic of Yemen. At the same time, the value of the Beta-standard regression factor is 0.824, which is a statistically significant value, and this result also supported by ( $r$ ) Pearson correlation coefficient. This may be due to the fact that the information technology used in the Yemeni commercial banks is positively reflected on the effectiveness of these systems through improving communication between the various departments, and used integrated systems and software packages which is suitable with the nature of the activity which connected electronically with each other to carry out accounting and financial operations, where it operates data and produce information running quickly with high accuracy and less effort, and availability of an effective training programs to keep pace with developments in information technology within the bank. Therefore, hypothesis  $H_0$  which presumes that there is no statistically significant relationship between information technology and the effectiveness of accounting information systems applied in the commercial banks in the Republic of Yemen is rejected, and the alternative hypothesis is accepted.

## 11.2. Training and user education

Simple linear regression analysis was carried out via using the predictor 'training and user education' as the independent variable and overall effectiveness of accounting information systems (AIS) as the dependent variable. The regression analysis is given in the table 5.

**TABLE 5**  
**REGRESSION ANALYSIS FOR THE RELATIONSHIP BETWEEN TRAINING AND USER**  
**EDUCATION AND AIS EFFECTIVENESS**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<b>Constant</b>	49.702	3.954		6.147	.000
<b>Training and User Education</b>	3.409	.220	.686	15.471	.000
<b>Adjusted R<sup>2</sup></b>	.468				
<b>R</b>	.686				
<b>F</b>	239.3				
<b>Significant</b>	.000				

Source: Field survey

The result obtained shows that, there is a positive relationship between training and user education and accounting information systems in commercial banks in Yemen. Through reviewing table 4.26, it could be seen that Sig = 0.000 < 0.05 and the value obtained in of 239.3 at less than 0.05 level of significance, which was statistically significant. On the opposite side, the training and user education has a significant influence on the accounting information system effectiveness as a whole, and that the training and user education as an independent variable has explained 0.65 from the total variation of accounting information system effectiveness, as ( $R^2 = 0.46.8$ ). It has been found that there is a direct significant relation between training and user education and accounting information system effectiveness, since ( $t = 15.471$  P-value less than 0.05). This means that whenever the degree of training and user education increases, the accounting information system effectiveness as a whole also increases vice versa.

From table could be seen the regression equation created in relation to one independent variable which can be expressed to predict the dependent variable as;

$$\text{AIS effectiveness} = 49.702 + 3.409 (\text{Training and User Education}).$$

From the equation, it could be inferred that, when the training and user education increases by one degree, the accounting information systems effectiveness increases in commercial banks in the Republic of Yemen by 3.409 degrees. This may be due to the fact that the training and education of the users of the accounting information systems in those banks is reflected positively on the effectiveness of these systems, which draws the attention of these banks about this factor through proper selection of employees and training them on the requirements of the system, choosing users of the systems and taking their relevant scientific qualifications into consideration by management of the bank, assessing the needs of users of the systems during their training to meet them, regularization of education and training programs for users of systems in the banking sector to increase awareness of the importance of these systems in the bank and its effectiveness. Moreover, the regression coefficient Beta is 686, which indicates there is a strong effect compared to other factors and this result is supported by a Pearson correlation coefficient ( $r = .686$ ) between the two variables that have the same value of regression coefficient Beta. Therefore,

hypothesis H0 which assumes that there is no statistically significant relationship between training and user education and the effectiveness of accounting information systems applied in the commercial banks in the Republic of Yemen is rejected. and the alternative hypothesis is accepted.

### 11.3. Multiple Linear Regression

Multiple linear regression is one of the most extensively employed methods in the analysis of data in the social sciences (Bryman & Cramer, 2001). This method can be employed to analyze the relationship between a single dependent variable and several independent variables (Ismail Azizi, 2007). Before employed multiple linear regression for testing the hypotheses of current study Multicollinearity test conducted for examines whether independent variables were highly associated with each other. Hence, to test the hypotheses, multiple regression was carried out to investigate the relationship among the various factors such as information technology and training and user education together and overall effectiveness of accounting information systems in commercial banks in the Republic of Yemen by the following regression equation:

$$Y = B_0 + B_1X_1 + B_2X_2$$

Whereas:

$B_0$  = Intercept

$Y$  = Effectiveness of AIS

$X_1$  = information technology

$X_2$  = training and user education

In the regression equation, we treated AIS effectiveness ( $Y_3$ ) as the dependent variable and information technology ( $X_1$ ), training and user education ( $X_2$ ) as the independent variables.

**TABLE 6**  
**MULTIPLE REGRESSION ANALYSIS FOR THE RELATIONSHIP BETWEEN FACTORS AND EFFECTIVENESS OF AIS**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
<b>Constant</b>	23.687	5.286		4.481	.000
<b>Information Technology</b>	1.174	.170	.344	6.909	.000
<b>Training and User Education</b>	.575	.221	.116	2.600	.010
<b>Adjusted R<sup>2</sup></b>	.790				
<b>R</b>	.891				
<b>F</b>	505.04				
<b>Significant</b>	.000				

Source: Field survey

The multiple regression equation for the above representation can be written as:

$$\text{Effectiveness of AIS} = 10.190 + 1.174 (X_1) + .575 (X_2)$$

(p=.000)    (p=.010)

The unstandardized regression coefficient (B) and intercept, the standardized regression coefficient ( $\beta$ ), R, and adjusted R<sup>2</sup>. The summary of the multiple regression analysis results is shown in the table 6 shows adjusted R<sup>2</sup> value is (0.79), which refers that the two independent variables information technology and training and user education collectively contribute to the explanation for 79 percent of the variation occur in the behavior of the dependent variable (effectiveness of accounting information systems in commercial banks in the Republic of Yemen). The summary of results shows that information technology ( $\beta_1 = 1.174$ ;  $p < 0.00$ ), training and user education ( $\beta_2 = 0.575$ ;  $p < 0.10$ ) contribute significantly to regression with t value of 6.909 and 2.600 respectively. Thus, the Hypothesis H3 which states that information technology and training and user education together have not significant relationship with effectiveness of accounting information systems in the commercial banks in the Republic of Yemen is rejected. And the alternative hypothesis is accepted.

## 12. Conclusions and Recommendations

The current study focuses on the perception of accounting information systems users in commercial banks in the Republic of Yemen regarding factors that influence Accounting information system effectiveness. This study figures out that there is a significant relationship between information technology, training and user education, and accounting information system's effectiveness. This study suggests that the necessity for Yemeni universities to increase interest in teaching accounting information systems as well as information technology in relation to networks, databases, and programming due to its close relationship with accounting, the necessity of coordination between commercial banks in Yemen and academic and banking institutions to provide training and educational programs appropriate for individuals working in the department of accounting information systems, and the need to involve commercial banks with designing university programs, especially in the bachelor of accounting and information technology to ensure that their application needs are included in those programs, and the network of AIS must be properly secured with firewall and intrusion detection systems in Yemen commercial banks, as well as uses of modern computer equipment and advanced software must be expanded, as it has a positive impact in raising the effectiveness of accounting information systems.

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