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The Influence of Advances in Information Technology on the Development of Accounting Among Accounting Students Medan State University

Inez Bita Nurisky[1], Michel Gabriela[2], Luna Putri Aritonang[3]

[1,2,3] Faculty of Economics, Medan State University
e-mail: inezbita2003@gmail.com [1]
Michel.gabriela2015@gmail.com[2]
lunaritonang05@gmail.com [3]

Penulis Korespondensi: Inez Bita Nurisky
e-mail : inezbita2003@gmail.com

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ABSTRAK

Kemajuan teknologi informasi telah memberikan dampak yang signifikan terhadap perkembangan akuntansi, khususnya dalam hal sistem informasi akuntansi. Penelitian ini bertujuan untuk menganalisis pengaruh kemajuan teknologi informasi terhadap perkembangan akuntansi, dengan fokus pada sistem informasi akuntansi. Metode penelitian yang digunakan adalah studi pustaka dengan menggunakan kata kunci teknologi informasi, perkembangan akuntansi, dan sistem informasi akuntansi. Hasil penelitian menunjukkan bahwa kemajuan teknologi informasi telah memungkinkan pengembangan sistem informasi akuntansi yang lebih efisien dan efektif. Sistem informasi akuntansi yang terintegrasi dengan teknologi informasi dapat meningkatkan keakuratan dan kecepatan pemrosesan data, serta memungkinkan pengambilan keputusan yang lebih baik. Namun, penggunaan teknologi informasi juga dapat menimbulkan tantangan, seperti risiko keamanan data dan perlunya keterampilan khusus dalam penggunaannya. Oleh karena itu, perusahaan harus mempertimbangkan dengan cermat penggunaan teknologi informasi dalam sistem informasi akuntansinya dan memastikan bahwa mereka memiliki sumber daya yang cukup untuk mengelolanya.

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Advances in information technology have had a significant impact on the development of accounting, especially in terms of accounting information systems. This research aims to analyze the influence of advances in information technology on the development of accounting, with a focus on accounting information systems. The research method used is a literature study using the keywords information technology, accounting developments, and accounting information systems. The research results show that advances in information technology have enabled the development of more efficient and effective accounting information systems. An accounting information system that is integrated with information technology can increase the accuracy and speed of data processing, and enable better decision-making. However, the use of information technology can also pose challenges, such as data security risks and the need for special skills in its use. Therefore, companies should carefully consider the use of information technology in their accounting information systems and ensure that they have sufficient resources to manage it.

1. INTRODUCTION

The development of information technology in the accounting field is very important, because the more advanced information technology becomes, the more influence it will have on the accounting field. Thus, the development of information technology has a significant impact on various fields, including the field of accounting. As a result of advances in information technology, the development of accounting is divided into three eras, namely the farming stage, the industrial era and the information era. The role in each era is not the same. The magnitude of the influence of IT in the accounting field is measured by how advanced the era is (Arya, 2022)

The development of accounting, where computerized AIS is produced in financial reports, influences audit practices. The audit process is influenced by changes in the accounting process because auditing is a branch of economics that uses financial reports (accounting products) as its objective. Developments in information technology also influence the audit process. Advances in audit software facilitate computerized audit methods.

IT is an activity related to the accounting profession. This is a great opportunity for the enormous development of AIS and the audit process which is a result of advances in IT and developments in accounting. The opportunity must be used as well as possible by accountants who have in-depth knowledge of AIS and computer-based auditing. However, this will displace accountants who lack in-depth knowledge of AIS and computer-based auditing because they cannot satisfy what clients ask for. (Elisabeth, 2019). Thus, it is very important for accounting students to understand the influence of IT advances on accounting developments so that they can follow developments and improve their abilities (Fauzi, 2022). This research aims to determine the influence of advances in information technology on the development of accounting among accounting students.

2. THEORETICAL FRAMEWORK

Information Technology

According to Martin et al. (2002), information technology is computer technology used to process and store information and communication technology that conveys information. The definition of IT is very broad where it includes all areas of technology used in recording, operating, communicating, presenting and using data to convert it into information (Martin et al., 2002: 125).

Information technology emerged as a result of widespread globalization in an organization, the more competitive a business is, the shorter the life cycle of products and services, and increasing consumer tastes for the products and services provided. For this reason, companies are looking for new breakthroughs to anticipate all this by using information technology and this will only be used for data processing. With the increasing development of information technology, all organizational activities now depend on IT applications and automation (Noviari, 2023).

Development of Accounting

Accounting is a collection of knowledge that includes the study of service utility techniques in the form of quantitative financial information regarding national organizational units regarding specific matters and how to communicate (report) this information to stakeholders which will later function as a basis for economic decision making (Suwardjono, 2005).

According to Bodnar and Hopwood (2004:1), an accounting information system is a collection of resources, such as people and equipment, used to transform financial data and decisions. According to Wilkinson (2000: 27), the specific components required by an accounting information system to perform its tasks vary depending on how automated the system is.

According to Hall (2001: 10), the general model elements of an accounting information system include end users, data sources, data collection, data processing, database management, information generation, and feedback.

AIS (Accounting Information System) is one of the areas of accounting that is most significantly influenced by information technology. An accounting information system is the part of an organization that helps people inside and outside the company make decisions by collecting, classifying, processing, and communicating financial data.

3. RESEARCH METHODS

This research uses a causal quantitative approach, where this approach aims to analyze how each variable is related to each other. According to Sugiyono, the causal method (2010: 56), "the relationship is causal, so here there are independent variables (which influence) and dependent variables (which are influenced)." This research aims to determine the influence of the use of information technology (X1) and accounting developments (X2) on accounting students (Y1).

Time and Place of Research

This research was conducted at Medan State University, especially students of the Accounting study program, Faculty of Economics. The research will be carried out in October 2023.

Research Population and Sample

The population used in this research were Accounting students at the Faculty of Economics, Medan State University, totaling 200 respondents in the class2020, 2021, 2022 and 2023. Sampling was carried out using the Stratified Sampling method with 40 respondents. Respondents' calculations used the Slovin formula quoted from Bambang (2005:137), namely:

$$n = \frac{N}{1 + N(e^2)}$$

Information:
n = Number of Samples
N = Population
e2= Error Rate 5%
The research sample calculation is as follows.

$$n = \frac{\text{N}}{1 + \text{N(e2)}}$$

$$n = \frac{-b \pm \sqrt{b^2 - 4ac}}{1(200(0{,}05^2))}$$

n = 173, 91
n = 174 (rounded)

Information Technology

Wrong use of information technology is a problem that arises as a result of advances in information technology, which results in losses for users.

Development of Accounting

The process of accounting development can be described as evolution over time. There are three phases of accounting development: the agricultural era, the industrial era, and the information age. In the development of accounting, each round has a special function.

Data, Instruments, and Collection Techniques

The data collection technique used is a questionnaire, which by using this technique can provide several questions or written statements for respondents to answer. This method is effective if the researcher knows the variables to be measured and expects the respondent's response. If the number of respondents is large enough and spread throughout the region, a questionnaire can also be used. Questionnaires can be closed or open statements/questions. Data analysis techniques use statistical analysis and requirements test analysis.

4. RESULTS AND DISCUSSION

Tabel 1. Major

No	Major	Frequency	Percent
1	Accountancy	40	100.0

The results of our research obtained 40 respondents from the Accounting department.

Table 2. Force

No.	Force	Frequency	Percent
1	2020	1	2.5
2	2021	33	82.5
3	2022	3	7.5
4	2023	3	7.5
Total		40	100.0

Our research results obtained 1 respondent from the class of 2020 amounting to 2.5%. Then, there were 33 respondents from the class of 2021, amounting to 82.5%. Then, as many as 3 respondents from the class of 2022 amounted to 7.5%. And finally, 3 respondents from the class of 2023 amounted to 7.5%.

Table 3. Gender

No.	Gender	Frequency	Percent
1	Man	6	15.0
2	Woman	34	85.0
Total		40	100.0

The results of our research obtained 6 male respondents amounting to 15.0% and 34 female respondents amounting to 85.0%.

Table 4. Age

No.	Age	Frequency	Percent
1	17	1	2.5
2	18	2	5.0
3	19	9	22.5
4	20	16	40.0
5	21	10	25.0
6	22	2	5.0
Total		40	100.0

The results of our research obtained 1 respondent aged 17 years as much as 2.5%. Then, as many as 2 respondents aged 18 years were 5.0%. Then, as many as 9 respondents aged 19 years

amounted to 22.5%. Then, there were 16 respondents aged 20 years, amounting to 40.0%. Then, as many as 10 respondents aged 21 years amounted to 25.0%. And finally, as many as 2 respondents aged 22 years amounted to 5.0%.

Descriptive Analysis

Advances in Information Technology

Table 5. Variable Frequency Trend Category Information Technology Progress

No.	Category	Frequency	Percent
1	Very affecting	12	30.0
2	Influence	23	57.5
3	Not affect	2	5.0
4	Doesn't really affect it	3	7.5
Total		40	100.0

In table 5, it is known that 12 respondents were in the very influential category, namely 30.0%. Then, as many as 23 respondents were in the influence category, namely 57.5%. Then, 2 respondents were in the no influence category, namely 5.0%. And finally, 3 respondents were in the very unaffected category, namely 7.5%.

Based on the results of the data that we have researched, it can be concluded that the respondents' assessment of the progress of Information Technology is influencing because the majority of respondents gave an influencing assessment.

Development of Accounting

Table 6. Categories of Frequency Trends in Accounting Development Variables

No	Category	Frequency	Percent
1	Very affecting	6	15.0
2	Influence	25	62.5
3	Not affect	8	20.0
4	Doesn't really affect it	1	2.5
Total		40	100.0

In table 6 it is known that as many as 6 respondents were in the very influential category, namely 15.0%. Then, as many as 25 respondents were in the influence category, namely 62.5%. Then, as many as 8 respondents were in the no influence category, namely 20.0%. And finally, 1 respondent was in the very unaffected category, namely 2.5%. Based on the results of the data that we have researched, it can be concluded that the respondents' assessment of Accounting Developments is not influential because the majority of respondents gave an assessment that it did not influence.

Data analysis

Table 7. One Sample Kolmogorov-Smirnov Sig Test Normality Results

	Unstandardize d Residual
N	40
Kolmogrov-Smirnov Z	0.085
Asymp.sig.(2-tailed)	0.2

The results of the normality test above, obtained a significance value from the KS test in the Kolmogorov-Smirnov regression model of 0.085 with a significance of 0.2. Based on these results, it can be concluded that the data is normally distributed because the significance value is 0.2 > 0.05.

Linearity Test

Table 8. Summary of Linearity Test Results

Variable	Fcount	Sig	Information
Y*X1	2,350	0.05	Linear
Y*X2	0.701	0.671	Linear

Based on the results of the linearity test, the value of the Influence of Information Technology Progress on Accounting Students is 0.05 and the value of Accounting Development on Accounting Students is 0.671. In calculating the Ftable results, the Accounting Student variable is 1.76. Thus, the Fcount of variable X1 to Y is smaller than Ftable, namely 2.35 > 1.76 and the Fcount of variable So it can be concluded that variables X1 and Y are not linear and variables X2 and Y are linear.

Hypothesis test

The results of the significant value are greater than the level of significance 0.056 > 0.05 which shows that the influence of information technology on accounting students, so it can be concluded that the influence of information technology on accounting students is normally distributed. This means that the influence of the use of information technology has an impact on accounting students, so the first hypothesis states that there is a positive influence of the use of information technology on accounting students.

The results of the significant value are greater than the level of significance 0.074 > 0.05 which indicates that the development of accounting for accounting students, so it can be concluded that the development of accounting for accounting students is normally distributed. This means that the influence of accounting developments has an impact on accounting students, so the second hypothesis states that there is a positive influence of accounting developments on accounting students.

The results of the significant value are greater than the level of significance 0.2 > 0.05, which indicates that the influence of information technology on accounting development, so it can be concluded that the influence of information technology on accounting development is normally distributed. This means that the influence of information technology has an impact on the development of accounting.

5. CONCLUSION

This research consisted of 40 respondents from the judiciary, generation, gender, age, and percent frequency trend categories. The results show that research has a significant influence on research findings, where 12 respondents are significantly influenced by the research topic, while 23 respondents are significantly influenced by the research topic. This study also found that the research findings showed that the research findings were not significantly influenced by the research topic, because most respondents did not provide any information regarding the research topic.

Data analysis includes a normality test which shows that the research results are normal, and a linearity test shows that the influence of the research on the research topic is significant. Hypothesis testing based on the results found that the research findings were not significant, as the research findings were not significant.

The research results show that the One Sample Kolmogorov-Smirnov Sig Test Normality Results. The results of the normality test above, obtained a significance value from the KS test in the Kolmogorov-Smirnov regression model of 0.085 with a significance of 0.2. Thus, the Fcount of variable X1 to Y is smaller than Ftable, namely 2.35 > 1.76 and the Fcount of variable

The results of the significant value are greater than the level of significance 0.074 > 0.05 which indicates that the development of accounting for accounting students, so it can be concluded that the development of accounting for accounting students is normally distributed.

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