

Digital Transformation in Encouraging the Advancement of Accounting Learning in the Industrial Era 5.0 Through Optimizing Learning in Schools and on Campus

Muhammad Azis¹

Department Accounting Education,
Faculty Economic and Business
Makassar State University

Fajriani Azis²

Department Accounting Education,
Faculty Economic and Business
Makassar State University

Wahyudi Putera³

Department Accounting Education,
Faculty Economic and Business
Makassar State University

Muhammad Rakib⁴

Department Accounting Education,
Faculty Economic and Business
Makassar State University

H.A. Baharuddin⁵

Departemen Management,
high school of management science
LPI College of Management

Abstract:- This study aims to explain and analyze the effect of digital transformation on accounting learning through optimizing learning to bridge the gap. The population in this study were teachers, lecturers, students and students totaling 40,515 in South Sulawesi Province. The sample used in this study was 150 respondents, using probability sampling or sample random sampling technique, namely sampling from the existing population randomly using the Slovin formula. The analysis technique used for hypothesis testing is path analysis using the help of the Program SPSS For Windows. The results showed that digital transformation indirectly (*indirect effect*) had a significant effect on optimizing learning. Furthermore, digital transformation directly (*direct effect*) has a significant effect on accounting learning. As well as learning optimization both directly and indirectly (*direct and indirect effect*) has a significant effect on accounting learning.

Keywords:- Digital Transformation, Learning Optimization and Accounting Learning.

I. INTRODUCTION

Accounting learning through the teaching and learning process at school and in college is formal, deliberate with the guidance of teachers at school and lecturers on campus and other educators. Where learning is a teaching and learning interaction between teachers and students, lecturers and students that encourages student learning behavior and student receiving teaching behavior, because students and

students are the key to learning or learning behavior and achieving learning goals. Learning is essentially conveying knowledge to students and students, guiding, organizing and organizing the environment around them so that students and students can understand and accept according to their absorption. Teaching is guiding the activities of students and students learning. Learning is organizing and organizing the environment around students so that it can encourage and foster students' desire to do learning activities (Nana Sudjana, 1989). The above definition implies that learning is a process carried out by the teacher in managing learning activities so that students can learn well. Teachers, are required to be able to act as organizers of student learning activities and can take advantage of the environment both in the classroom and outside the classroom, which supports teaching and learning activities. Meanwhile, lecturers in teaching students by providing methods that can be absorbed by students by searching and finding other sources outside so that students can combine what they get in campus with what they get outside the campus. A study conducted by A.Nurkhin, et al. (2020) said that students have good critical and creative thinking skills. In the second cycle, researchers continued to use Google Classroom and combined it with face-to-face lectures using "make a note" assignments and group discussions. The researchers conducted quantitative measurements to see the success of the treatment. The results showed that students were able to obtain better grades than before the treatment. A data that shows a graph of the growth of students and college students in conducting the teaching and learning process in schools and college students include the following:

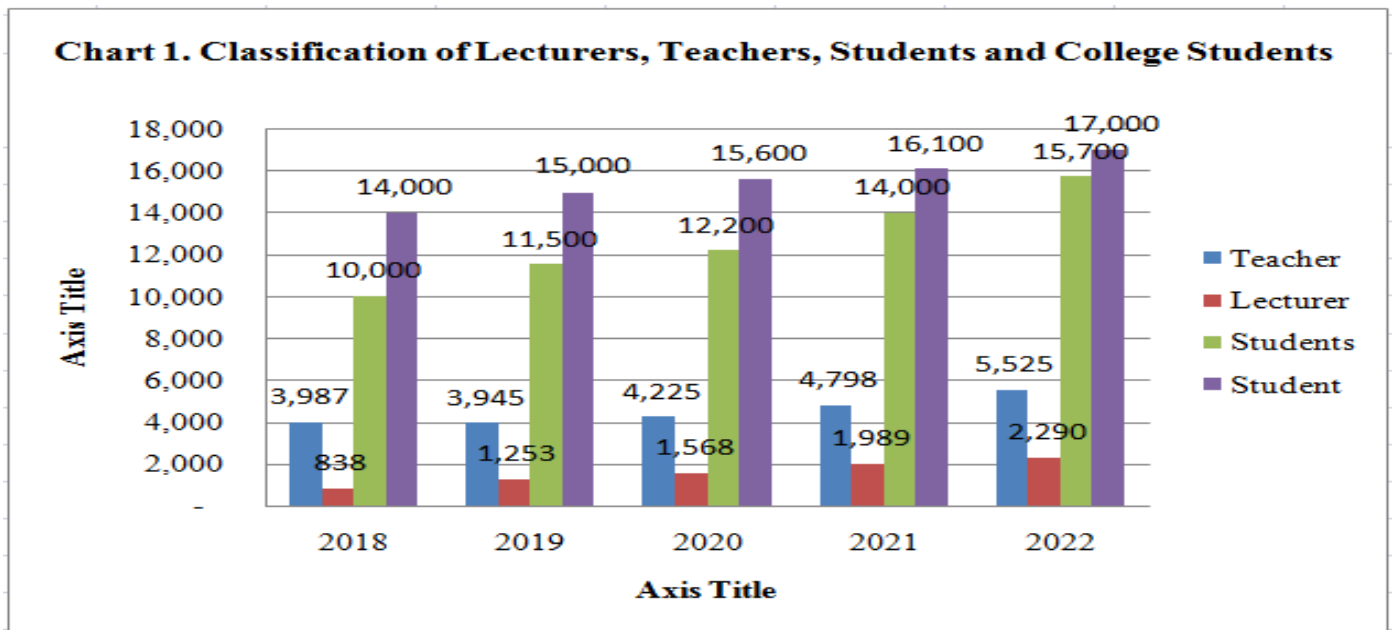


Chart 1 Classification of Lecturers, Teachers, Students and College Students

Source: Data processed by teachers, students and students of South Sulawesi Province, 2023

From chart 1 above, data taken randomly from teachers, lecturers, students and students from a number of elementary, junior high, high school and university campuses, colleges, institutes in South Sulawesi Province can be seen from the graph of the increase in teachers from 2018 by 3,987 to 5,525 in 2023, then lecturers from 2018 by 838 lecturers to 2,290 in 2023, then students from 2018 by 10,000 to 15,700 in 2023 and students from 2018 by 14,000 to 17,000 in 2023. Optimization Teaching and learning activities that take place in schools are formal, deliberate, planned with the guidance of teachers, and the help of other educators. All learning competencies to be achieved and mastered by students are outlined in learning objectives, preparation of teaching materials in accordance with learning objectives, selection of appropriate learning methods and determination of evaluations to determine student learning progress. Therefore, in an effort to achieve teaching objectives, it is necessary to optimize the components that support. To achieve teaching goals all these components must be combined and developed in such a way, as the opinion states, "In order for the goal to be achieved all existing components must be properly organized and optimized so that fellow components work together (Syaiful Sagala, 2003). conclusion that learning optimization is a process of activities carried out by teachers in managing student learning activities by optimizing all components that support to get better learning results. Learning activities will be optimal if supported by a teaching program that is systematically arranged. Then in achieving the realization of the era of digital technology and the formation of industry 4.0 which is now developing through the accounting learning process and optimization in supporting digital transformation which requires organizational changes involving people, processes, strategies, structures, through the use of technology and business models to improve performance (G.Westerman et al., 2011).

From a number of studies that have been conducted by experts, it states that transformation affects optimization, stating that efficiency, optimization, speed and time limits have always been very important for logistics systems, while speed and time savings in real-time mode are key factors with the transition to digital technology and the formation of Industry 4.0 because they become competitive advantages (V.Anisimov, et al, 2018). Furthermore, digital transformation affects accounting learning, stating that the transformation of the role of accountants in the era of the industrial revolution 4.0 and the challenges of the era of society 5.0. This study aims to determine the transformation of the role of accountants in the era of the industrial revolution 4.0 and the challenges that accountants will face in the era of society 5.0 (R.Rosmida, 2019). As well as along with the rapid development of science and technology. This development is characterized by the need for a learning concept by utilizing google systems and iLearning media. The current system greatly affects the mindset and creativity of each student. To support the learning system, it provides facilities and creates a situation that supports the improvement of student learning abilities (H.Ariessanti, et al, 2020).

II. LITERATURE REVIEW

A. Digital Transformation

The term "digital transformation" can be applied to both industry-level and organizational changes. For the purpose of this research, it only refers to organizational change. Digital transformation includes the process of digitization with a focus on efficiency, and digital innovation with a focus on enhancing existing physical products with digital capabilities (Y.Yoo, et al, 2012). The increasing proliferation of digital technologies has been an important catalyst for organizational transformation in recent decades (H. Kukkonen-Oinas, et al, 2010), enabling organizations to exploit new use cases (C.Matt et al., 2015),

integrate digital technologies and business processes (Chen, Liu & W.C.Huang, 2011), and potentially facilitate major business improvements (M.Fitzgerald, et al, 2014). The term transformation refers to a fundamental change in the organization, which has a major impact on the strategy and structure of the organization (Matt et al., 2015) and the distribution of power (D.J.Wischnevsky & F.Damanpour, 2006). It therefore requires companies to realign and initiate a change process regarding their internal structure as well as their business model, which is undoubtedly a challenging organizational learning process (D.Schuchmann & S.Seufert, 2015). Digital transformation is an actively designed and executed change process (P.Besson & F.Rowe, 2012), therefore it is necessary to understand the mechanisms of digitalization and build a common understanding within the company.

B. Learning Optimization

Optimization according to language comes from the word optimal, which means the best or highest. While the affix -ization in the word optimization xxvi points to the adjective, so that optimization means a process of activity to achieve the best results. A teaching and learning process is an instructional system that refers to the understanding as a set of components that depend on each other to achieve goals, as a teaching and learning system which includes a number of components including goals, media, materials, students, teachers, methods and evaluation. To achieve teaching goals all these components must be combined and developed in such a way, as the opinion states, "In order for the goal to be achieved all existing components must be properly organized and optimized so that fellow components work together" Syaiful Sagala, 2003: 225. Optimizing learning is a teacher's effort to optimize learning outcomes in the form of changes in behavior and learning achievement by optimizing the components that influence these learning activities. In this study, it will be seen that one of the components that affect the learning outcomes is the teaching method used by the teacher, namely the conventional method and the drill method. Optimization of accounting learning is a conscious effort made by accounting teachers to optimize accounting learning outcomes in the form of changes in behavior and accounting learning achievement by optimizing all components that affect accounting learning activities. 2. High School Accounting Teaching Before discussing the definition of accounting teaching, the author will first discuss the definition of teaching. Teaching is an activity carried out to create a condition in which learning subjects can master knowledge, have attitudes and skills. This is in accordance with the opinion stating that, "In simple terms, teaching refers to an activity that contains the process of mastering knowledge, skills and attitudes by subjects who are learning" (Suharsimi Arikunto, 1990).

C. Accounting Learning

To face the industrial revolution 4.0 or the era of disruption, new literacy is needed in addition to old literacy. Old literacy includes calistung competence (read, write, and calculate), while new literacy includes data literacy, technology literacy, and human literacy. Data literacy is related to the ability to read, analyze and make thinking

conclusions based on the data and information (big data) obtained. Technological literacy is related to the ability to understand how machines work, technology applications and work based on technology products to get maximum results. Human literacy is related to the ability to communicate, collaborate, think critically, creatively and innovatively. The first type of literacy that must be mastered today is digital literacy. In this modern and interconnected era, it is impossible to develop without relying on various digital platforms. P.Gilster (1997) suggests that digital literacy means the ability to understand and use information in various forms from a wide variety of sources accessed through computer devices, while D.Bawden (2001) relates digital literacy to the technical skills of accessing, assembling, understanding and disseminating information. There are several competencies needed to prepare for the industrial era 4.0 including problem solving, adaptability, collaboration, leadership, and creativity and innovation. There are five abilities that must be possessed by the younger generation in order to face the industrial revolution 4.0, namely the ability to think critically, creatively and innovatively, the ability to communicate, the ability to work together, and self-confidence.

➤ Hypothesis

• Digital Transformation Affects Learning Optimization

Digital transformation obtained influential and significant results. This shows the indirect effect of digital transformation variables carried out can affect the optimization of learning in class. Research and research on digital transformation research results state that the proposed models and methods help solve a wide spectrum of practical tasks of logistics planning in digital transformation conditions in line with digital transformation has an effect and is significant to the optimization of learning (V.Anisimov, et al, 2018). In line with the research of S.Sayganov, et al. (2020) stated that this development is proposed as an instrument for digital transformation and optimization of health care services, which includes improving the technical, methodical and structure of primary care settings and emergency medical care and using new instrumentation, digital technology and telemedicine. And recent research reveals that technology-as-a-business-driver will play an important role in driving organizational transformation. Digital Transformation is thus given priority in an organization's strategic agenda to create a new paradigm in value delivery mechanisms. Digitalization is no longer an option, but a must-do choice for the futurization of organizations to create competitiveness, sustainability, and growth (A.Ganguly, 2015).

➤ H.1: Digital Transformation has a significant effect on Learning Optimization

• Digital Transformation Affects Accounting Learning

Digital transformation obtained influential and significant results. This shows the direct influence of digital transformation variables carried out is able to influence accounting learning at school and on campus. Research and research on digital transformation research results state that

to face the challenges of the Society 5.0 era, accountants need to do the following five things: investing in developing digital skills, implementing new technology prototypes, while learning by doing, international certification-based education, being responsive to changes in industry, business and technological developments, and digital-human skills-based curriculum and learning (for educational institutions) in line with digital transformation has a significant effect on accounting learning (R.Rosmida, 2019). Furthermore, it concluded that some have anticipated accounting learning in Society 5.0, but there are still many opportunities for improvement (M.Malau, 2021). And digital technology must play a role in supporting developments in the student learning process in accounting education. In some universities, these information technology tools and systems are used to assist teaching in accounting courses to teach students accounting concepts at a basic level (Z.B.Berikol & M.Killi, 2021).

➤ *H.2: Digital Transformation has a significant effect on Accounting Learning*

• *Optimization Affects Accounting Learning*

Optimization obtained the results of influence and significant on accounting learning. This shows that the direct and indirect effects of optimization variables carried out are able to influence accounting learning at school and on campus. Research and research on optimization of research results state that students are able to get better grades than before being given treatment in line with optimization affecting accounting learning (A.Nurkhin, et, al, 2020). As well as in the learning system with Google Drive and iLearning Media (iMe) can store and share documents with other users Google Drive provides storage services with a large enough capacity to store both documents, images, videos, and others (D.H.Ariessanti, et al, 2020); (M.Azis & F. Azis, 2021).

➤ *H.3: Learning Optimization has a significant effect on Accounting Learning*

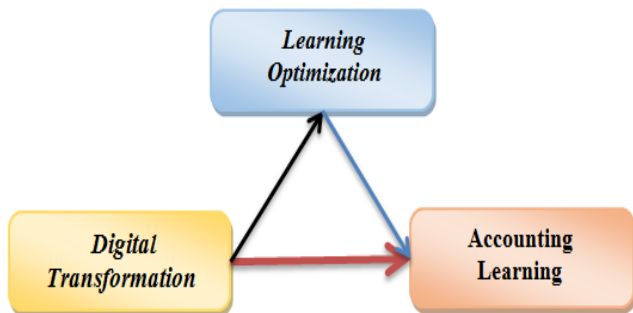


Fig 1 Conceptual Framework of Relationship between Variables

III. RESEARCH METHOD

The research was conducted in a number of schools, university campuses and institutes in South Sulawesi Province. This location was chosen because South Sulawesi Province is well known for its effective teaching and learning process so that South Sulawesi Province is one of

the areas producing quality education that has been touched by the digitalization era. The population in the study were teachers, lecturers, students and students who were directly involved in the teaching and learning process in the classroom totaling 40,515. In this study only conducted research for students and students how effective teaching and learning methods that have entered the digitalization era in the province of South Sulawesi. The sampling technique was carried out by probability sampling with sample random sampling technique, namely sampling from the existing population randomly using the Slovin formula (E.Slovin, 1960). Based on calculations using the Slovin formula, a sample size of 150 respondents was obtained. The units of analysis used in this study are teachers, lecturers, students and students who are directly involved in the teaching and learning process in the classroom with sample specifications that have been determined by the researcher, namely students and students who have at least been teaching and learning in schools and campuses for the past 2 years, the age of the respondent and the number of students.

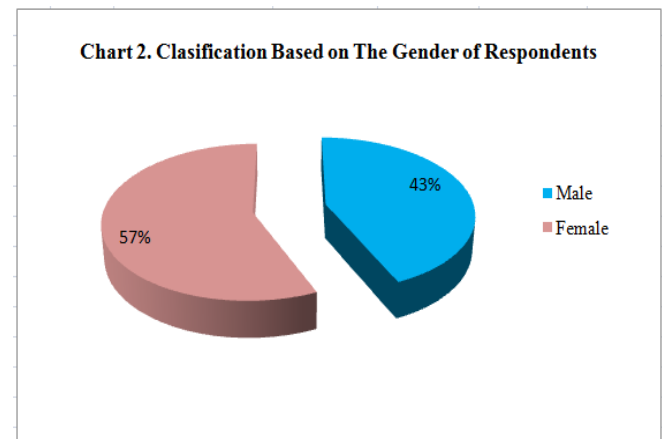


Chart 2 Classification Based on the Gender of Respondents Source: Data Processed Respondents of Teachers, Lecturers, Students, Students of South Sulawesi Prov (N = 150), 2023

From chart 2 above, most of the respondents were female as many as 85 respondents or 57% and 65 respondents or 43% were male.

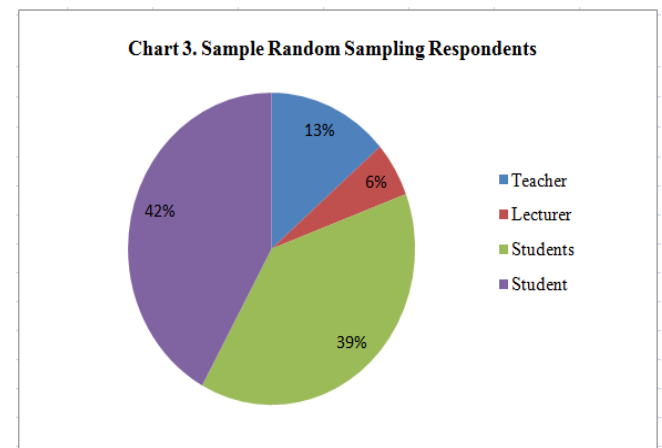


Chart 3 Sample Random Sampling Respondents Source: Data Processed Respondents of Teachers, Lecturers, Students, Students Prov Sul-Sel (N = 150), 2023

Based on chart 3. above, most of the student respondents were 60 or 42% of respondents, then student businesses were 52 or 39% of respondents, then teachers were 20 or 13% and lecturers were 18 or 6%. Data collection in this study used a questionnaire method. Respondents' answers were measured using a 5-point Likert scale. The data analysis technique used is path analysis using the help of the Program SPSS For Windows.

IV. RESULTS AND DISCUSSION

❖ *Results*

➤ *Validity Test*

Table 1 Test Validity Correlations

		Digital Transfor mation	Learning Optimization	Accounting Learning
Digital Transformation	Pearson Correlation	1	.023	.501**
	Sig. (2-tailed)		.783	.000
	N	150	150	150
Learning Optimization	Pearson Correlation	.023	1	.234**
	Sig. (2-tailed)	.783		.004
	N	150	150	150
Accounting Learning	Pearson Correlation	.501**	.234**	1
	Sig. (2-tailed)	.000	.004	
	N	150	150	150

** Correlation is significant at the 0.01 level (2-tailed).

Source: Data Processed SPSS Program, (N = 150), 2023

The result in table 1 validity test above shows that all question/statement items to measure digital transformation variables (X.1), learning optimization (X.2) and accounting learning (Y) in this study have a correlation coefficient greater than ttable = 0.650 (t-table value for n = 150). So, it can be concluded that all items in the question/statement indicators of digital transformation variables (X.1), optimization of learning (X.2) and accounting learning (Y) are valid.

➤ *Reliability Test*

Table 2 Test Reliability Reliability Statistics

Cronbach's Alpha	N of Items
.843	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Digital Transformation	43.5333	31.163	.183	.764
Learning Optimization	44.6333	20.784	.164	.752
Accounting Learning	42.9800	22.234	.143	.738

Source: Data Processed SPSS Program, (N = 150), 2023

The result in table 2 reliability test above shows that the questions / statements for the variable value of digital transformation items, optimization of learning and accounting learning have a *Cronbach's Alpha* value of 0,843, *Cronbach's Alpha if Deleted* is above 0.7 and above the rtable value of 0.130 (rtable value for n = 150) and so it can be argued that the question / statement items for the question statement variables for digital transformation variables, optimization of learning and accounting learning are suitable for use as data collection tools and as measuring instruments.

➤ *Classical Assumption Test*

Table 3 Test Normality One-Sample Kolmogorov-Smirnov Test

		Digital Transfor mation	Learning Optimization	Accounting Learning
N		150	150	150
Normal Parameters ^{a,b}	Mean	22.0400	20.9400	22.5933
	Std. Deviation	2.27292	4.08012	2.97438
Most Extreme Differences	Absolute	.110	.084	.088
	Positive	.096	.084	.085
	Negative	-.110	-.080	-.088
Kolmogorov-Smirnov Z		1.351	1.034	1.073
Asymp. Sig. (2-tailed)		.052	.235	.200

a. Test distribution is Normal.

b. Calculated from data.

Source: Data Processed SPSS Program, (N = 150), 2023

The result in table 3 normality test, It can be concluded that the results of the data normality test with Kolmogorov-Smirnov by comparing the value of the probability number or Asymp. Sig (2-tailed) with a significance level of 0.05 or 5% with decision making if the significance value is less than 0.05 or 5% then the data distribution is abnormal. Based on the calculation of Program SPSS above is the value of the probability number or Asymp. Sig (2-tailed) with a significance level above 0.05 or 5%, the data is declared normally distributed.

Table 4 Test Autocorrelation Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.848 ^a	.700	.691	1.50511	1.104

a. Predictors: (Constant), Learning Optimization, Digital Transformation

b. Dependent Variable: Accounting Learning

Source: Data Processed SPSS Program, (N = 150), 2023

The results in table 4 autocorrelation test, show that the autocorrelation test above produces a Durbin-Watson value of 1.104. This value is not less than -2 and not more than 2 so it can be concluded that there is no autocorrelation in this study.

Table 5 Heteroscedasticity Test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.811	1.319		.614	.540
	Digital Transformation	.000	.053	.001	.007	.995
	Learning Optimization	.056	.030	.154	1.890	.061

a. Dependent Variable: RES2

Source: Data Processed SPSS Program, (N = 150), 2023

The results in table 5, show each digital transformation variable (X.1) with Sig 0.995, optimization of learning (X.2) with Sig 0.061 each variable (Sig.) > 0.05 or above 0.05, it can be concluded that there are no symptoms of heteroscedasticity.

➤ Indirect Testing

Table 6 F-Simultaneous Test

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.278	1	16.278	29.376	.003 ^a
	Residual	279.182	148	1.751		
	Total	2480.460	149			

a. Predictors: (Constant), Digital Transformation

b. Dependent Variable: Learning Optimization

Source: Data Processed SPSS Program, (N = 150), 2023

Based on table 6 above, simultaneous testing together shows a regression value of 1.278, residual 279.182, df 1, mean square 16.278. f value 29.376 with sig .003 which means that indirectly together digital transformation has a significant effect on optimizing learning.

Table 7 Partial t-test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	20.042	3.268		.132	.000		
	Digital Transformation	.141	.048	.3227	6.276	.003	1.000	1.000

a. Dependent Variable: Learning Optimization

Source: Data Processed SPSS Program, (N = 150), 2023

• Based on the results of the path analysis in Table 7, the structural equation can be formulated as follows:

- ✓ $X.2 = 3.227 X1 e1$
- ✓ The structural equation can be interpreted as:

- ✓ The digital transformation variable has a coefficient of 3.227 which means that indirectly digital transformation has a significant effect on learning optimization, meaning that if digital transformation increases, learning optimization will increase.

- ✓ The following are the calculation results from the direct test analysis results in table 8 as follows.

➤ Direct Testing

Table 8 F-Simultaneous Test

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	395.686	2	197.843	31.526	.000 ^a
	Residual	922.507	147	6.276		
	Total	1318.193	149			

a. Predictors: (Constant), Learning Optimization, Digital Transformation

b. Dependent Variable: Accounting Learning

Source: Data Processed SPSS Program, (N = 250), 2023

Based on table 8 above, simultaneous testing together shows the regression value of 395.686, residual 922.507, df 2, mean square 197.843. f value 31.526 with sig .000 which means that directly together digital transformation and learning optimization have a significant effect on accounting learning.

Table 9 Partial t-test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.902	2.240		2.188	.030		
	Digital Transformation	.649	.090	.496	7.183	.000	.999	1.001
	Learning Optimization	.162	.050	.222	3.221	.002	.999	1.001

a. Dependent Variable: Accounting Learning

Source: Data Processed SPSS Program, (N = 150), 2023

• Based on the results of the path analysis in Table 9, the structural equation can be formulated as follows:

- ✓ $Y = 0.496 X1 + 0.222 X2 e1$
- ✓ The structural equation can be interpreted as:
- ✓ The digital transformation variable has a coefficient of 0.496, which means that digital transformation directly has a significant effect on accounting learning, meaning that if digital transformation increases, accounting learning will increase.
- ✓ The learning optimization variable has a coefficient value of 0.222, which means that directly learning optimization has an influence on accounting learning, meaning that the increase in learning optimization will affect accounting learning. In this study, the effect of digital transformation and learning optimization on accounting learning was calculated through the SPSS Program for windows program.

Table 10 Coefficient of Determination
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848 ^a	.700	.691	1.50511

a. Predictors: (Constant), Learning Optimization, Digital Transformation

b. Dependent Variable: Accounting Learning

Source: Data Processed SPSS Program, (N = 150), 2023

The result in table 10 tests the value of the coefficient of determination (R²) and the error variable (e) In calculating the total coefficient of determination obtained of 0.848, it is concluded that 84.8% of the accounting learning variables in schools and campuses are influenced by digital transformation and learning optimization, while the remaining 15.2% is influenced by other factors not included in the research model or outside the research model.

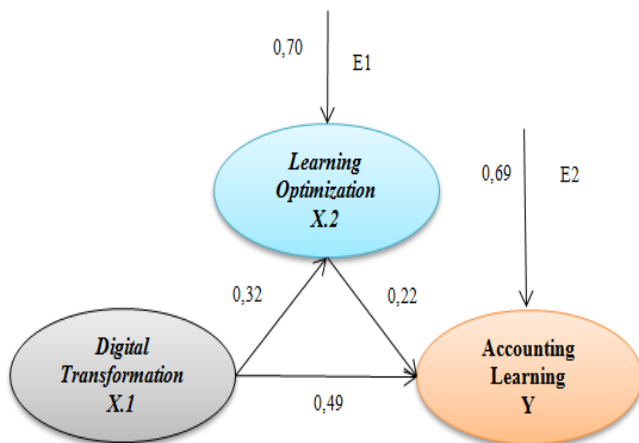


Fig 2 Direct And Indirect Relationship Results

Source: Data processed by the Program SPSS, (N=250), 2023

➤ Description:

- X1 : Digital Transformation
- X2 : Learning Optimization
- Y : Accounting Learning
- P : Path coefficient
- E1, E2 : Residual variables/factors
- X3 : endogenous variable
- X1 and X2: exogenous variables
- Px3X1: coefficient of direct causal relationship between X1 and X2
- Px3X2: coefficient of direct causal relationship between X2 and Y
- Structure equation: $Y = P_{x3X1}X1 + P_{x3X2}X2 + E1$
- E1: residual coefficient calculated by the formula

$$E_1 = \sqrt{(1 - R^2)} \text{ (A.Riduwan, 2009:152)}$$

➤ The Regression Equation that can be Proposed by Looking at Figure 2 is as follows:

Learning Optimization = 3.227 digital transformation X1 e1

Accounting Learning = 0.496 digital transformation X1 + 0.222 learning optimization X2 e1

- The value of 3.227 is the standard regression coefficient of digital transformation on learning optimization (in SPSS denoted by Beta). The value of 0.496 is the standard regression coefficient of digital transformation on accounting learning (in SPSS denoted by Beta) and the value of .222 is the standard regression coefficient of learning optimization on accounting learning (in SPSS denoted by Beta).
- The value of 0.848 is the Squared Multiple Correlation between digital transformation and learning optimization with accounting learning (in SPSS denoted by R²). This value is the magnitude of the simultaneous influence between the digital transformation and learning optimization variables on accounting learning. The magnitude of squared multiple correlation or R² for accounting learning of 0.848 indicates that 84.8%, which means that the variance of accounting learning can be explained by the digital transformation and learning optimization variables. The magnitude of R² between 0.3 to 0.6 according to B.R.Kline (2004) indicates a fairly strong explanatory power of exogenous variables on endogenous variables.
- When viewed from the weight of the estimated coefficient, it can be explained that the indirect effect of digital transformation on accounting learning is relatively weaker than the direct effect of digital transformation and learning optimization on accounting learning.

➤ Hypothesis Testing

• Hypothesis 1

Based on hypothesis testing, it is evidenced by the t-value of 6.276 > 1.96 with a significance of Prob 0.003 < 0.05 (5%), this shows that digital transformation has a significant effect on optimizing learning in the classroom, which means that the hypothesis is accepted.

• Hypothesis 2

Based on hypothesis testing, it is evidenced by a t-value of 7.183 > 1.96 with a significance of Prob 0.000 < 0.05 (5%), this shows that digital transformation has a significant effect on accounting learning at school and campus, which means that the hypothesis is accepted.

• Hypothesis 3

Based on hypothesis testing, it is evidenced by a t-value of 3.221 > 1.96 with a significance of Prob 0.002 < 0.05 (5%), this shows that learning optimization has a significant effect on accounting learning at school and campus, which means that the hypothesis is accepted.

❖ Discussion

➤ *The Effect of Digital Transformation on Learning Optimization*

The results showed that digital transformation indirectly affects the optimization of classroom learning with an R² value of 0.723 with an R Square of 0.601 with a t-value of 6.276 > 1.96 with prob < 0.003. This means that if the digital transformation will be enabled, it will affect the optimization of learning. The achievement of learning optimization is inseparable from how digital transformation is provided. Where digital transformation includes The intensity of the application and utilization of digital literacy in learning activities, the number and variety of reading materials and digital-based teaching aids and the frequency of borrowing digital-themed books as a form of fulfillment of the teaching and learning process. If you look at the research results which show that digital transformation affects the optimization of learning, then the teaching and learning process in the classroom must be able to provide optimization of learning to students and students with mastery accuracy, speed for work, level of learning transfer and level of retention.

The final results of indirect effect testing of digital transformation variables with indicators of the intensity of application and utilization of digital literacy in learning activities, the number and variety of reading materials and digital-based teaching aids and the frequency of borrowing digital-themed books. The learning optimization variable consists of indicators of mastery accuracy, speed for work, learning transfer rate and retention rate. In line with research conducted by V. Anisimov, et al. (2018) which shows that efficiency, optimization, speed and time limits have always been very important for logistics systems, while speed and time savings in real-time mode are key factors with the transition to digital technology and the formation of Industry 4.0 because they become competitive advantages. The innovative use of technologies in areas such as data analytics, Internet of things and cloud computing significantly transforms logistics and transportation systems as a result of digital marriage and the existing supply chain becomes a catalyst for the transition to "Logistics 4.0". Furthermore, this development is proposed as an instrument for digital transformation and optimization of healthcare services, which includes improving the technical, methodical and regulatory structure of primary care and emergency medical care and using new instrumentation, digital technologies and telemedicine (S.Sayganov, et al, 2020). And the quest to create and maintain relevance in a competitive world acts as a driving force for innovation and transformation. Recent research reveals that technology-as-a-business-driver will play an important role in driving organizational transformation. Digital Transformation is thus given priority in the strategic agenda of organizations to create a new paradigm in value delivery mechanisms. Digitalization is no longer an option, but a must-do option for futurizing organizations to create competitiveness, sustainability, and growth (A.Ganguly, 2015).

➤ *The Effect of Digital Transformation on Accounting Learning*

The results showed that digital transformation directly (*direct effect*) affects accounting learning in schools and campuses with an R² value of 0.848 with an R Square of 0.700 with a t-value of 7.183 > 1.96 with prob < 0.000. This means that if digital transformation will be enabled, it will affect accounting learning. The achievement of accounting learning is inseparable from how digital transformation is provided. Where digital transformation includes the intensity of application and utilization of digital literacy in learning activities, the number and variety of reading materials and digital-based teaching aids and the frequency of borrowing digital-themed books as a form of fulfilling the teaching and learning process at schools and campuses. If you look at the results of research showing that digital transformation affects accounting learning, then the teaching and learning process in schools and campuses must be able to provide accounting learning to students and students with an in-depth understanding of theoretical concepts about planning, procedures, audit reporting, financial reporting, financial management, quality management, business ethics, the accounting profession's code of ethics, information needs for decision making, taxation, business law and the concept of economic and organizational science principles.

The final results of direct testing (*direct effect*) of digital transformation variables with indicators of the intensity of application and utilization of digital literacy in learning activities, the number and variety of reading materials and digital-based teaching aids and the frequency of borrowing digital-themed books. Accounting learning variables with indicators of planning, procedures, audit reporting, financial reporting, financial management, quality management, business ethics, code of ethics for the accounting profession, information needs for decision making, taxation, business law and principle concepts of economics and organization. In line with research entitled transformation of the role of accountants in the era of the industrial revolution 4.0 and the challenges of the era of society 5.0. This study aims to determine the transformation of the role of accountants in the era of the industrial revolution 4.0 and the challenges that accountants will face in the era of society 5.0. To face the challenges of the Society 5.0 era, accountants need to do the following five things: investing in developing digital skills, implementing new technology prototypes, while learning by doing, international certification-based education, responsive to changes in industry, business and technological developments, and digital-human skills-based curriculum and learning (for educational institutions) (R.Rosmida, 2019). Furthermore, the Industrial Revolution 4.0 research is a work process and a fundamental change in the way humans live. Advances in information technology integrate the world with digital which can have an impact on scientific disciplines. concluded that some have anticipated accounting learning in Society 5.0, but there are still many opportunities for improvement (M.Malau, 2021). And Information and Communication Technology (ICT) has developed very rapidly, so that our era has been characterized as the information age. The rapid development

of technology causes significant changes at the micro and macroeconomic levels. With rapid changes in ICT, mobilization has become a valuable tool in our age when knowledge is the most valuable asset. Documentary research method; this method refers to the collection and organization of previously obtained, archived, organized, and documented data from various sources (library, internet, etc). With archival browsing, establishing meaningful relationships on the data instead of operational analysis and making some conclusions. Thus, this study aims to contribute to the literature with this research (Z.B.Berikol & M.Killi, 2021).

➤ *Effect of Optimization on Accounting Learning*

The results showed that learning optimization directly and indirectly (*direct and indirect effect*) had an effect on accounting learning at school and campus with an R2 value of 0.848 with an R Square of 0.700 with a t-value of $3.221 > 1.96$ with prob < 0.002 . This means that if the optimization of learning will be enabled, it will affect accounting learning. The achievement of accounting learning is inseparable from how the optimization of learning is given to students and students. Where the optimization of learning includes mastery accuracy, speed for work, level of learning transfer and level of retention as a form of fulfilling the teaching and learning process at school and campus. If you look at the research results which show that learning optimization affects accounting learning, then the teaching and learning process in schools and campuses must be able to provide accounting learning to students and students with an in-depth understanding of theoretical concepts about planning, procedures, audit reporting, financial reporting, financial management, quality management, business ethics, the accounting profession's code of ethics, information needs for decision making, taxation, business law and the concept of economic and organizational science principles.

The final results of direct and indirect effects of learning optimization variables with indicators of mastery accuracy, speed to work, learning transfer rate and retention rate. Accounting learning variables with indicators of planning, procedures, audit reporting, financial reporting, financial management, quality management, business ethics, accounting profession code of ethics, information needs for decision making, taxation, business law and princil concepts of economics and organization. In line with this development is characterized by the need for a learning concept by utilizing google systems and iLearning media. The current system greatly affects the mindset and creativity of each student. To support the learning system, it provides facilities and creates a situation that supports the improvement of student learning abilities. In the learning process, the most important problem that often occurs with conventional learning that still uses a manual learning process using stationery so that the learning atmosphere is less interesting for students. Activities in learning are still not optimal where it still uses one direction. With the proposed method using Google Drive and iLearning Media (iMe), it provides convenience and student activeness with learning that can be realized that the learning process is carried out effectively, meaning that the learning process

can run smoothly, directed and in accordance with the learning objectives. This brings influence with the transformation process of conventional learning systems into digital form, both in content and systems that are easily accepted directly by students (D.H.Ariessanti, et al, 2020). The results showed that students had good critical and creative thinking skills. In the second cycle, researchers continued to use Google Classroom and combined it with face-to-face lectures using "make a note" assignments and group discussions. The researchers conducted quantitative measurements to see the success of the treatment. The results showed that students were able to obtain better grades than before the treatment (A.Nurkhin, et al, 2020); (M.Azis & F.Azis, 2021).

V. CONCLUSIONS AND SUGGESTIONS

➤ *Conclusion*

Based on the results of empirical testing and discussion, the conclusion of this study is that digital transformation indirectly (indirect effect) has a significant effect on optimizing learning in the classroom through indicators of the intensity of application and utilization of digital literacy in learning activities, the number and variety of reading materials and digital-based teaching aids and the frequency of borrowing digital-themed books on optimizing learning in the classroom. Digital transformation directly (direct effect) has a significant effect on accounting learning in schools and campuses through indicators of understanding theoretical concepts in depth about planning, procedures, audit reporting, financial reporting, financial management, quality management, business ethics, the accounting profession's code of ethics, information needs for decision making, taxation, business law and the principle concepts of economics and organization. As well as the optimization of learning directly and indirectly (direct and indirect effect) affects accounting learning in schools and campuses able to encourage the creation of mastery accuracy, speed for work, level of learning transfer and level of retention in supporting the accounting learning process teaching and learning process in schools and campuses in South Sulawesi Province.

➤ *Suggestions*

Based on the research results and conclusions that have been described, there are several suggestions in terms of digital transformation of the intensity of the application and utilization of digital literacy in learning activities, the number and variety of reading materials and digital-based teaching aids and the frequency of borrowing digital-themed books need to be supported again so that the digital transformation process in the world of education can run well. Then the optimization of learning through mastery accuracy, speed for work, learning transfer rate and retention rate also needs to be supported from various aspects as a form of fulfilling the teaching and learning process in schools and campuses to further develop, especially the world of education in South Sulawesi Province.

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