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ANALYSIS OF THE READINESS OF EDUCATOR ACCOUNTANTS IN FACING THE ERA OF INDUSTRIAL REVOLUTION 4.0

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Abstract

The aim of this study is to determine the readiness of educator accountants in facing the era of the industrial revolution 4.0 in the Department of Accounting, Economics and Business Faculty, Halu Oleo University. This study uses the variable Self Efficacy (X 1) to measure the ability of educator accountants in carrying out tasks at a certain level, the variable Technology Readiness Index (X 2) to measure the readiness of educator accountants in adopting new technologies, and the variable Readiness for Changes (Y) to measure the readiness of educator accountants in dealing with changes and adopting these changes. Sources of data used are primary and secondary data with data collection methods using documentation and questionnaires. Data analysis method uses descriptive analysis method and multiple linear analysis. The results showed that the readiness of educator accountants in facing the era of the industrial revolution 4.0 was quite ready. This is proven from the results of testing the answers to questions related to readiness in facing the era of the industrial revolution 4.0, namely the average value of each variable. In the Self Efficacy variable, the value of 4.16 is categorized as good, the Technology Readiness Index variable with a value of 3.46 is categorized as good, and the Readiness for Changes variable with a value of 4.25 is categorized as very good.

Keywords: *Self Efficacy, Technology Readiness Index, Readiness for Changes.*

1. INTRODUCTION

The increasingly rapid development of technology and information requires all professional fields to continue to develop ways of working quickly and precisely so as not to be left behind by the times and to achieve goals efficiently. Likewise, the field of Accounting, a branch of economics, studies various types of financial analysis. With increasingly modern technology , it demands that accounting be able to make more use of technology. Developing technology forces individuals to immediately make fundamental changes in their work. For some people who can follow, this change is considered very positive, but for others it will be very difficult and can disturb comfort, causing resistance to emerge in the organization (1).

The accounting profession is predicted to be disrupted by technological developments, especially artificial intelligence (AI) and machine learning . In the next 20-30 years, the routine and manual work usually done by an accountant will be taken over by machines and robots. Researchers from the University of Oxford, Michael Osborne and Carl Frey, conducted research on how big the risk of a profession experiencing automation.

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As a result, certified accountants have a 95% risk of automation in the next two decades. In the industrial era 4.0, higher education is required to be able to overcome the turbulent changes that occur due to digital transformation. The Minister of Research, Technology and Higher Education advised in his speech at the XIII IAI Congress Seminar in Jakarta that accountants should not underestimate the impact of technology and need to master non-financial data such as data analysis and online communication. Several universities in Indonesia have also started to apply technology in daily activities on campus (2).

Educational accountants need to be knowledgeable and prepared to use technology, including online learning systems like SPADA. SPADA is an internet-based platform that allows participants to access materials and interact with content, instructors, and peers. The readiness of educational accountants is crucial for the successful implementation of this system.

Typically, educational accountants exhibit confidence, optimism, and self-assurance when adopting new technology. An individual is considered ready to adopt technology if they believe in their ability to perform assigned tasks and are optimistic that technology will enhance control, flexibility, and efficiency in their daily work (3).

There are several methods for analyzing the level of individual readiness in facing change to adopt technology, including Technology Readiness Index (TRI) developed by Parasuraman, namely an index to measure user readiness for new technology. This method has four variables which are used as analytical variables for the level of readiness, namely optimism , innovation (Innovativeness), discomfort and insecurity.

Another measuring tool uses indicators in Self-efficacy Theory , which is a person's assessment of themselves or the level of confidence regarding how much a person is able to do a certain task to achieve certain results. Self-efficacy has three indicators to analyze the level of readiness, namely ability (Magnitude), personal strength (Strength) and confidence (generality) (4).

From the example of the method used to analyze individual readiness in adopting technology, this research will use Technology Readiness Index (TRI) and self-efficacy theory , because these methods have measurement variables that focus on individual readiness in using the Online Learning System. The advantage gained from these two methods is that regarding the focus of the targets studied, TRI uses a technology approach in analyzing individual readiness, while self-efficacy uses a social approach.

The studies carried out are different, the TRI method is more about a person's/individual's readiness to adopt new technology, while self efficacy is more a factor of individual confidence in facing tasks/challenges which are given. Given these differences, in this research, we want to combine these two approaches in analyzing the readiness of educational accountants (5).

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The concept of Industrial Revolution 4.0 was introduced at the World Economic Forum (WEF). Germany invested €200 million to support collaboration among academics, government, and business sectors in researching Industrial Revolution 4.0. This revolution emphasizes automation performed by machines, reducing the need for human labor, and is crucial for industrial efficiency in terms of time, labor, and costs.

This approach in factories is often referred to as Smart Factory. Additionally, real-time data collection and exchange can now be conducted via the internet, allowing stakeholders to oversee production and bookkeeping processes from anywhere with internet access. (6).

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Self-efficacy stems from Bandura's social cognitive theory (1977), which posits that learning involves mastering knowledge through the cognitive processing of received information. Essentially, the theory asserts that the knowledge and behavior of organizational members are primarily shaped by their environment and are continually processed cognitively. This dynamic affects individual motivation, attitudes, and behaviors, with each person's cognitive processing varying based on their unique personal characteristics.

Self-efficacy refers to an individual's belief in their ability to perform tasks at a certain level, significantly impacting their task achievement. According to Bandura, self-efficacy comprises three dimensions: 1) Level/Magnitude, which relates to task difficulty and the individual's choice of tasks based on their perceived difficulty; 2) Strength, which pertains to the confidence in one's ability to perform tasks optimally; and 3) Generality, which involves the individual's assurance in successfully completing various tasks that differ from each other (7).

The Technology Readiness Index (TRI), developed by Parasuraman in 2000, measures a person's readiness to embrace new technologies for achieving their goals in daily life and work. The TRI includes four key factors: 1) Optimism, which involves a positive attitude toward technology and the belief that it enhances control, flexibility, and efficiency; 2) Innovativeness, which reflects a tendency to be a pioneer in adopting and using new technologies; 3) Insecurity, which refers to feelings of unease or concerns about privacy when using technology; and 4) Discomfort, which denotes a preference for traditional methods due to unease in using technology in daily life or work (4).

Readiness for Change was stated by Hanpachern (1977), namely the extent to which an individual is mentally, psychologically or physically ready or primed to participate in organizational development activities, especially referring to the condition of someone having a high score on promoting and participating in change. There are three dimensions used to measure the level of readiness, *namely appropriateness, change specific efficacy, management support and personal valance* (8).

Based on the theory above, the following research hypothesis is produced:

- H_1: *Self Efficacy* has a significant effect on the readiness of educational accountants to face the era of industrial revolution 4.0 (*Readiness for Change).*
- H_2: *The Technology Readiness Index* has a significant effect on the readiness of educational accountants to face the era of industrial revolution 4.0 (*Readiness for Change).*
- H_3: *Self Efficacy* and *Technology Readiness Index* has a significant influence on the readiness of educational accountants in facing the era of industrial revolution 4.0 (*Readiness for Change).*

3. RESEARCH METHODS

The population in this research is all active accounting students in the Accounting Department , Faculty of Economics and Business , Halu Oleo University , totaling 642 people , 163 people from the 2018 class, 227 from the 2019 class . people and the class of 2020 was 252 people. The sample in this study was selected using the Slovin formula which resulted in a total of 246 people.

The primary data source used in this research is questionnaire data filled in by respondents who are the objects of this research, namely active students in the Accounting Department, Faculty of Economics and Business, Halu Oleo University. The questionnaire is made in the form of a structured questionnaire where respondents are limited to providing answers to certain alternative answers only. Meanwhile, secondary data in this research took data from the Accounting Department, Faculty of Economics and Business, Halu Oleo University, namely data on the number of lecturers and educational history, as well as data obtained from journals, theses and references from the internet.

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Data collection methods in this research include questionnaires and documentation. According to Sugiyono (2018), a questionnaire involves giving respondents a set of written statements to answer. Documentation gathers necessary data related to the research, such as organizational structure, duties and responsibilities, rank, class, and gender (9). Based on the primary data obtained, the frequency distribution of each answer was grouped according to the indicators and answer items. The scale used is a Likert scale which has a score of 1 to 5.

In providing meaning for empirical assessment of variables, this research adopts the principle of weighting or score values of respondents' answers which are classified into a range of value category scales presented in the following table:

Table 1: Determination of Average Categories of Respondent Statement Scores

Average Answer Score	Category Meaning/Interpretation
1.00 – 1.80	Very Low/not good
1.80> - 2.60	Low/ Not good
2.60> – 3.40	Fair/ Fair
3.40 – 4.20	High/ Good
4.20>	Very High/ Very Good

Source: Solimun et al 2017

The analytical tool employed in this research is multiple linear regression analysis, utilizing IBM SPSS Statistics Version 22 software. This analysis aims to test the significant impact of Self Efficacy (X1) and Technology Readiness Index (X2) on Readiness for Change (Y). The relationship between these variables can be represented by the following equation (10):

$$Y = a + b_1X_1 + b_2X_2 + e$$

Where:

Y = *Readiness for Changes*

a = Constant number

$b_1 – b_3$ = Regression coefficient

X_1 = *Self Efficacy*

X_2 = *Technology Readiness Index*

e = Standard deviation (error)

Hypothesis testing in this research includes the F statistical test, t statistical test, and coefficient of determination test, conducted after confirming the regression model is free from classical assumption issues. The classical assumption tests performed are the normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test..

4. RESULTS AND DISCUSSION

a. Descriptive Analysis Results

This research involved distributing 246 questionnaires to accounting students at Halu Oleo University through the website and class and organizational groups. The return rate was 170 responses, or 69%. Respondent characteristics considered in this study include age and gender.

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Table 2: Recapitulation of Frequency Distribution of Respondents' Answers to the *Self Efficacy Variable*

Item (Grain)	Respondent Answer Frequency (F) & Percentage (%)										Average Score	Category
	STS(1)		TS(2)		N (3)		S(4)		SS(5)			
	F	%	F	%	F	%	F	%	F	%		
X1.1.1	2	1.17	1	0.58	17	10	90	52.94	60	35.29	4.21	Very good
X1.1.2	1	0.58	0	0	13	7.64	92	54.12	64	37.65	4.28	Very good
X1.1. 3	1	0.58	2	1.17	12	7.06	87	51.18	68	40	4.29	Very good
Average *Magnitude Indicator* ($X_{1.1}$)											**4.26**	**Very good**
X1.2.1	1	0.58	2	1.17	22	12.94	88	51.76	57	33.53	4.16	Good
X1.2.2	2	1.17	1	0.58	23	13.53	99	58.23	45	26.47	4.08	Good
X1.2.3	0	0	6	3.53	24	14,19	90	52.94	50	29.41	4.08	Good
Average *Strength Indicator* ($X_{1.2}$)											**4.11**	**Good**
X1.3.1	1	0.58	3	1.76	38	22.35	74	43.52	54	31.76	4.04	Good
X1.3.2	1	0.58	2	1.17	18	10.58	92	54.19	57	33.53	4.19	Good
Average *Generality indicator* ($X_{1.3}$)											**4.11**	**Good**
Average *Self Efficacy Variable* (X_1)											**4.16**	**Good**

Source: Primary data processed, 2022

Based on the distribution of respondents' answer scores on the *self-efficacy variable* (X_1) in table 2, it can be seen that of the 170 respondents studied, in general respondents gave a good perception of *self-efficacy* as seen from the average score of respondents' answers. The average answer to all items on this variable is in the positive area or the good and very good category, which means that *self-efficacy* can have a positive impact on teaching accountants in facing the era of industrial revolution 4.0.

Table 3: Recapitulation of frequency distribution respondents' answers to *the Technology Readiness Index variable*

Item (Grain)	Respondent Answer Frequency (F) & Percentage (%)										Average Score	Category
	STS(1)		TS(2)		N (3)		S(4)		SS(5)			
	F	%	F	%	F	%	F	%	F	%		
X 2.1.1	4	2.35	1	0.58	33	19.4	83	48.8	49	28.82	4.01	Good
X 2.1.2	1	0.58	3	1.76	42	24.7	81	47.7	43	25.29	3.95	Good
X 2.1.3	1	0.58	2	1.17	25	14.7	91	53.5	51	30	4.11	Good
X 2.1.4	1	0.58	4	2.35	17	10	86	50.6	62	36.47	4.2	Very good
Average *Optimism Indicator* ($X_{2.1}$)											**4.06**	**Good**
X 2.2.1	2	1.17	12	7.06	56	32.9	70	41.2	30	17.65	3.67	Good
X 2.2.2	0	0	15	8.82	69	40.6	66	38.8	20	11.76	3.54	Good
X 2.2.3	3	1.76	5	2.94	31	18.2	84	49.4	47	27.6	3.98	Good
Average *Innovativeness Indicator* ($X_{2.2}$)											**3.73**	**Good**
X 2.3.1	11	6.47	34	20	74	43.5	46	27.1	5	2.94	3	Good
X 2.3.2	9	5.29	38	22.35	77	45.3	42	24.7	4	2.35	2.96	Pretty good
Average indicators *Discomfort* ($X_{2.3}$)											**2.98**	**Pretty good**
X 2.4.1	11	6.47	36	44.71	76	44.7	39	22.9	8	4.71	2.98	Pretty good
X 2.4.2	10	5.88	32	36.47	62	36.5	42	24.7	24	14,12	3.22	Pretty good
Average indicators *Insecurity* ($X_{2.4}$)											**3.1**	**Pretty good**
Average *Technology Readiness Index Variable* (X_2)											**3.46**	**Good**

Source: Primary data processed, 2022

Based on the distribution of respondents' answer scores on the *Technoloy Readiness Index variable* (X_2) in table 3, it can be seen that of the 170 respondents studied, in general the respondents' perception of the statement items on *the Technoloy Readiness Index* was 3.46. This means that respondents gave a good perception of *the Technoloy Readiness Index* as seen from the average score of respondents' answers.

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The results of the analysis of respondents' answers to the *Technoloy Readiness Index variable* (X_2), there were several answers that fell into the quite good category, but the majority of respondents' answers agreed to the *Technoloy Readiness Index variable question* . The average answer to all items on this variable is in the positive area or good category, which means that *the Technoloy Readiness Index* can have a positive impact on teaching accountants in facing the era of the industrial revolution 4.0.

Table 4: Recapitulation of frequency distribution respondent's answer to *the Readiness for Changes variable*

Item (Grain)	Respondent Answer Frequency (F) & Percentage (%)										Average Score	Category
	STS(1)		TS(2)		N (3)		S(4)		SS(5)			
	F	%	F	%	F	%	F	%	F	%		
Y_1	2	1.17	6	3.53	16	9.41	71	41.76	75	44.11	4.24	Very good
Y_2	2	1.17	4	2.35	19	11.17	89	52.35	56	32.94	4.14	Good
Y_3	1	0.58	4	2.35	18	10.58	89	52.35	58	34.11	4.17	Good
Y_4	0	0	3	1.76	9	5.29	65	38.23	93	54.7	4.46	Very good
Average Variable *Readiness for Changes* (Y)											**4.25**	**Very good**

Source: Primary data processed 2022

Based on the score distribution of respondents' answers to *the Readines for Changes* (Y) variable in table 4, it can be seen that of the 170 respondents studied, in general the respondent's perception of the statement items in *Readines for Changes* was 4.25. This means that respondents gave a good perception of the industrial revolution 4.0 as seen from the average score of respondents' answers.

The results of the analysis of respondents' answers to the *Readines for Changes variable* (Y) showed that the majority of respondents' answers agreed to the *Readines for Changes variable question.* The average answer to all items on this variable is in the positive area or good category, which means that *Readines for Changes* can have a positive impact on educational accountants in facing the era of industrial revolution 4.0. The results of coefficients and Cronbach alpha to test validity and reliability using question items from variable indicators are as follows:

Table 5: Recapitulation of Validity and Reliability test results

Variable	Variable Indicator	Items	Correlation coefficient	Sig.	Ket.	*Cronbach Alpha*	Ket.
Self Efficacy (X_1)	*Magnitude* ($X_{1.1}$)	X 1.1.1	0.903	0.00	Valid	0.929	Reliable
		X 1.1.2	879	0.00			
		X 1.1. 3	0.868	0.00			
	Strength ($X_{1.2}$)	X 1.2.1	0.858	0.00	Valid	0.917	Reliable
		X 1.2.2	0.877	0.00			
		X 1.2.3	0.864	0.00			
	Generality ($X_{1.3}$)	X 1.3.1	0.913	0.00	Valid	0.917	Reliable
		X 1.3.2	0.884	0.00			
Technology Readiness Index (X_2)	*Optimism* ($X_{2.1}$)	X 2.1.1	0.866	0.00	Valid	0.937	Reliable
		X 2.1.2	0.87	0.00			
		X 2.1.3	0.898	0.00			
		X 2.1. 4	0.863	0.00			
	Innovativeness ($X_{2.2}$)	X 2.2.1	0.839	0.00	Valid	0.888	Reliable
		X 2.2.2	0.793	0.00			
		X 2.2.3	0.86	0.00			
	Discomfort ($X_{2.3}$)	X 2. 3.1	0.859	0.00	Valid	0.873	Reliable
		X 2. 3.2	0.844	0.00			
	Insecurity ($X_{2.4}$)	X 2. 4.1	0.836	0.00	Valid	0.88	Reliable
		X 2. 4.2	0.88	0.00			
Readiness for Changes (Y)		Y 1.1.1	0.897	0.00	Valid	0.926	Reliable
		Y 1.1.2	0.902	0.00			
		Y 1.1.3	0.855	0.00			
		Y 1.1.4	0.759	0.00			

Source: Primary Data processed in 2020

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Table 5 shows that all items in the indicators for each *self-efficacy variable* (X_1), *Technology Readiness Index* (X_2) and *Readiness for Changes* (Y) are declared valid and reliable. This decision was taken because the Pearson correlation value was > 0.30 with a significance level of < 0.05 and the correlation coefficient value from the *Cronbach alpha results* was > 0.60. So it can be concluded that all statement items used as instruments in this research are valid and reliable, or it can be said that the questionnaire used is suitable as an instrument for measuring each variable.

Classic assumption test

Table 6: Multicholine aarity test results

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	X1	,800	1,250
	X2	,800	1,250

In table 6 Shows that the tolerance number for each variable in this study is above 0.10 and the VIF value is below 10. This shows that there is no correlation between the independent variables so it can be concluded that there is no multicollinearity.

Heteroscedasticity test is carried out via scatter plot (scatter diagram). The results of data analysis show that the resulting transmitter diagram is as follows:

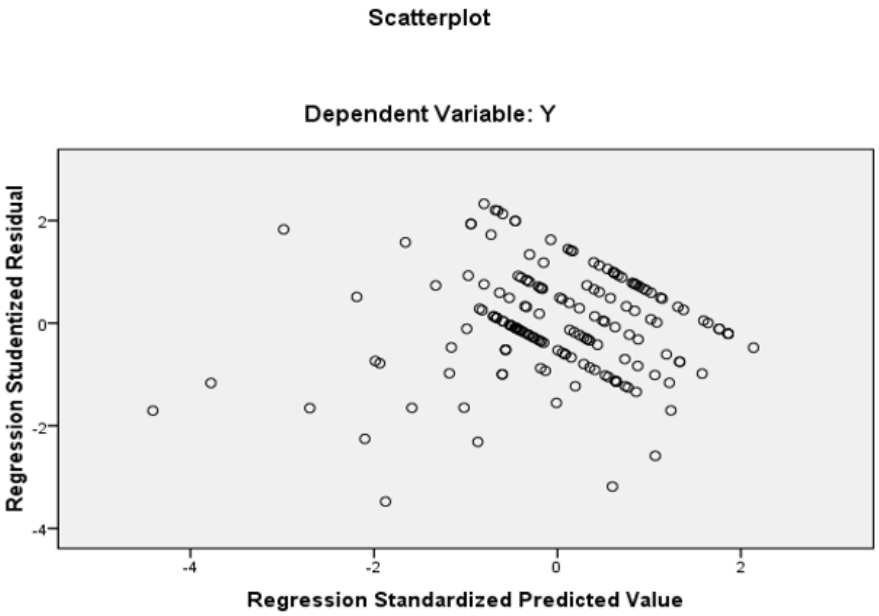

Figure 1: Heteroscedasticity test results

Source: Primary Data Processed in 2020

From the scatterplot graph, it can be seen that the points are spread randomly and the graph is spread above and below the number 0 on the Y axis. Thus it can be concluded that this regression model does not have heteroscedasticity.

The normality test is carried out to find out whether there is a regression model. Dependent variables and independent variables are normally distributed or not. To test normality, this can be seen from the Normal Probability Plot graphic display (P -P Plot Test).

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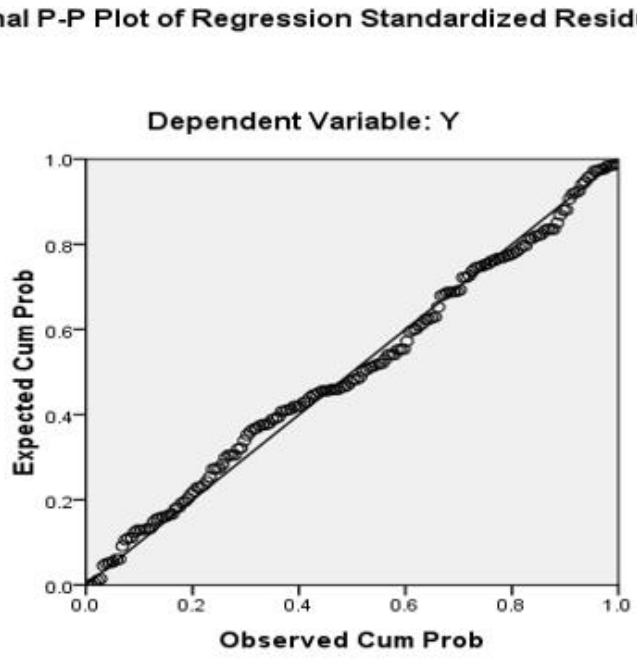

Figure 2: Normality Test Results

Source: Primary data processed in 2020

Based on the Normal Probability Plot image in Figure 2, it is found that the data is spread around the diagonal line, and the spread follows the direction of the diagonal line, and the spread follows the direction of the diagonal line. So the regression model is suitable for use for predictions and meets the Normality assumption.

Table 7: Autocorrelation Test Results (Durbin Watson)

Model Summary [b]					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	,688 [a]	,473	,467	.48206	1,370
a. Predictors: (Constant), X2, X1					
b. Dependent Variable: Y1.1					

To detect the presence or absence of autocorrelation, the Durbin –Watson test is carried out with the following conditions:

1. DW numbers below -2 have positive autocorrelation
2. DW numbers below -2 to +2 mean there is no autocorrelation
3. A DW number below +2 means there is negative autocorrelation

Based on the output summary in table 7, it can be seen that the Durbin Watson (DW) number is 1.370, where this number is between -2 to +2, which means there is no autocorrelation.

Multiple Linear Regression Analysis

The research data as described in the variable description, used the multiple linear regression method which was processed using the IBM SPSS Statistics 22 program. This was done to find out whether there was an influence of the variables *self efficacy* and *technology readiness index* on *readiness for*

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changes in teaching accountants. in the Accounting Department of Halu Oleo University and from the processing results the values obtained are as listed as follows:

Table 8: Summary of Multiple Linear Regression Test Results, t Test, F Test and Coefficient of Determination

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,528	,315		1,675	,096		
	X1	,579	,069	,528	8,415	,000	,800	1,250
	X2	,369	,088	,264	4,202	,000	,800	1,250

a. Dependent Variable: Y1.1

Source: primary data processed in 2022

It is known that the constant value of n is 0.528. The regression coefficient value for the *self efficacy variable* is 0.579 and *the technology readiness index* is 0.369, which means that there is a positive relationship between *self efficacy* and *the technology readiness index* and *readiness for changes*. Hypothesis Test Results were carried out to prove whether *self efficacy* and *the technology readiness index* partially and simultaneously has an influence on *readiness for changes*, the following results were obtained:

1. First Hypothesis Testing

Table 8 shows that the t-count for the *self-efficacy variable* is 8.415> from the t-table, namely 1.65 or with a significance level of 0.000 <from α = 0.05, then the test results under H_1 are accepted or H_0 is rejected. This shows that *self-efficacy* partially has a significant influence on the readiness of educational accountants to face the era of industrial revolution 4.0 (*readiness for changes*).

2. Second hypothesis testing

Table 8 shows that the t-calculation for *the Technology Readiness Index variable* is 4.202 > from the t-table which is 1.65 or with a significance level of 0.000 < from α = 0.05, so from the test results it can be concluded that H_2 is accepted or H_0 is rejected. This shows that *the Technology Readiness Index* partially has a significant influence on the readiness of educational accountants to face the era of industrial revolution 4.0 (*readiness for changes*).

3. Third Hypothesis Testing

Table 8 shows the research results showing that the f-count for the *Self efficacy* and *Technology readiness index variables* is 75.049 from the f table, namely 2.66 or with a significance level of 0.000 < from α = 0.05, so from the test results it can be concluded that H_3 is accepted or H_0 is rejected. This shows that *Self-efficacy* and *Technology Readiness Index* simultaneously have a significant influence on the readiness of educational accountants in facing the era of industrial revolution 4.0 (*Readiness for changes).*

The results of statistical calculations explain that the R Square value is 0.473 or 47.30%, which means that the independent variables (*self-efficacy and technology readiness index)* have an influence of 47.30% on the dependent variable (readiness *for changes).*

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b. Discussion

Influence *Self Efficacy* on the Readiness of Educator Accountants in Facing the Industrial Revolution Era 4.0 (*Readiness for Changes*)

The results of the first hypothesis state that *self-efficacy* has a significant influence on the readiness of educational accountants to face the era of industrial revolution 4.0 (*readiness for changes)*, meaning that the self-confidence and ability of educational accountants in the Accounting Department, Faculty of Economics and Business, Halu Oleo University, influences readiness to change and adopt the revolution. industry 4.0.

This research certainly cannot be separated from respondents' answers to their perceptions of the self-confidence of an educational accountant. Based on the answers from respondents, *the magnitude indicator* is categorized as very good. In general, teaching accountants who have a high *level of self-efficacy* tend to carry out tasks according to their main tasks and tasks, whatever the type of work, so that whatever type of work is their main task, they will do it regardless of the level of difficulty.

Educating accountants feel confident using online learning systems even though they are faced with several limitations and difficulties such as lack of facilities and internet access. This is in line with the opinion of Paul CJ in Yanif which states that self-confidence is closely related to work performance, meaning that the higher the level of self-confidence, the higher the work performance produced, and vice versa (11). So according to the perception of accounting students, teaching accountants in the Accounting Department, Faculty of Economics and Business, Halu Oleo University are ready to face the era of industrial revolution 4.0 regardless of the level of difficulty.

On the *strength indicator*, results were obtained in the good category, meaning that it is an educational accountant confident that you can carry out and complete the task as well as possible. . Educating accountants feel they can work effectively on different tasks (12). Coupled with technology, it makes it easier to do everything anytime and anywhere. So according to the perception of accounting students, teaching accountants in the Accounting Department, Faculty of Economics and Business, Halu Oleo University are ready to face the era of the industrial revolution 4.0 because they are confident so they are able to complete all the tasks given.

From the respondents' answers to *the generality indicator* , it shows a good category, meaning that teaching accountants have an attitude of being able to work in different situations, conditions and types of work. In certain situations, teaching accountants sometimes do different jobs at the same time and have deadlines, in that situation they need confidence that they are able to do a variety of jobs in a variety of situations and conditions.

So according to the perception of accounting students, teaching accountants in the Accounting Department, Faculty of Economics and Business, Halu Oleo University are ready to face the era of industrial revolution 4.0 even though the work given is different and under certain conditions.

Influence Technology *Readiness Index* on the Readiness of Educator Accountants in Facing the Industrial Revolution Era 4.0 (*Readiness for Changes*)

Based on the results of the regression analysis that tests the hypothesis, it shows that the calculated t value is greater than the t table with a greater level of significance. So the results of this research show that *the technology readiness index* influences the readiness of educational accountants in facing the era of industrial revolution 4.0 (*readiness for changes).*

Based on the results of respondents' questionnaire answers, the *optimism indicator* is categorized as good. Educating accountants believe that technology makes work more effective and efficient in doing work. For example, when an educational accountant is on a business trip out of town but has a

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teaching schedule. Educating accountants can apply the online learning system so they can continue to travel on business and can also attend lectures. This aligns with Fadila's (2022) research, which found that optimism significantly affects the readiness to adopt SIMPEG.

Additionally, the innovativeness indicator is rated as good, indicating that the innovation skills of educational accountants are crucial in adapting to changes in the era of Industrial Revolution 4.0. Educational accountants are consistently open to learning new technologies and other innovations, frequently seeking advice from others to facilitate their activities (13).

The third indicator that forms *the Technology Readiness Index* is *Discomfort* which is categorized as quite good. This means that educational accountants are less comfortable using, controlling and tend to hesitate when faced with new technology. This is caused by factors such as age and level of education. Bandura believes that individuals who have a higher level of education usually have a higher level of comfort and *self-efficacy in doing work, because basically* they learn more and receive more formal education, besides that individuals who have a higher level of education will have more opportunities to learn in overcoming problems (14).

Apart from this, educational accountants also feel that the guidance on using technology is not presented in simple language so it is difficult for ordinary people to understand. The final indicator is *insecurity* which is categorized as quite good, which means that educational accountants are quite suspicious of technological security and is usually related to data security reasons.

A person's insecurity regarding the use of technology can be interpreted as feeling suspicious or unsure that the data entered *through* the system that is sent to the server will arrive perfectly, in addition to feeling unsure that the data that has been sent will be easily taken by unauthorized people interested. During the learning process, only a few accountant educators use technology, especially email, as a medium for sending assignments. This is because educational accountants are afraid of losing or spreading personal data and are more comfortable using manual methods (15).

Influence *Self Efficacy* and *Technology Readiness Index* on the Readiness of Educational Accountants in Facing the Industrial Revolution Era 4.0 (*Readiness for Changes*)

Based on the results of this research, it can be understood that *self-efficacy* has an influence in facing changes in the era of industrial revolution 4.0. An educational accountant must have the ability to carry out different tasks and the confidence that he can complete the tasks given properly and correctly. If an educational accountant has *self-efficacy*, it will be easy to carry out the tasks that have been previously determined. On the other hand, if educational accountants do not have this, they will face difficulties that will make them ineffective and inefficient (16).

The technology readiness index also plays an important role in facing changes in the era of the industrial revolution 4.0. Imagine if an educational accountant had a pessimistic attitude in using technology, then the work would become inefficient because it would take a very long time to complete. An innovative attitude also makes educational accountants more willing and aware of new products or services from technology (17).

However, comfort and security in using technology is still quite good according to this research because educational accountants are still afraid of data loss or the spread of personal information. So, according to the perception of accounting students, it can be said that the self -*efficacy* and *technology readiness index* of teaching accountants in the Accounting Department, Faculty of Economics and Business, Halu Oleo University in facing the era of industrial revolution 4.0 are ready.

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5. CONCLUSION

Based on the results of the research and discussion that have been presented, the following conclusions can be drawn:

1. *Self Efficacy* partially has a significant effect on *Readiness for Changes* in teaching accountants in the Accounting Department, Faculty of Economics and Business, Halu Oleo University.
2. *Technology Readiness Index* partially influential significant impact on *Readiness for Changes* in teaching accountants in the Accounting Department, Faculty of Economics and Business, Halu Oleo University.
3. *Self Efficacy* and *Technology Readiness Index* simultaneously have an effect significant impact on *Readiness for Changes* in teaching accountants in the Accounting Department, Faculty of Economics and Business, Halu Oleo University.

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