Influence of Competence and Locus of Control on Readiness of Accounting Department Students Facing the World of Work Era Industrial Revolution 4.0

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Abstract
This study discusses ethical competencies, knowledge competencies, capability competencies, relationship competencies, analytical competencies, and locus of control on the readiness of students majoring in accounting in the world of work of the revolution era 4.0. The population of the study was in the 2017 class of faculty of economics and business students of Udayana University. The research sample was determined by the nonprobability sampling method which obtained a total sample of 166 people. The data analysis technique used is multiple linear regression analysis. The results showed that the results showed ethical competence, knowledge competence, capability competence, relationship competence, analytical competence, and locus of control had a positive effect on the readiness of students majoring in accounting in connecting the world of work of the industrial revolution era 4.0.

Keywords:
competency;
era revolusi industry 4.0;
locus of control;
student readiness;
the world of work;

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1 Introduction

Technological developments in the world of business have developed very fast to bring Indonesia into a new era that has reached the fourth generation. The revolution that has reached the fourth generation has changed the digital revolution that is fundamentally changing the way of life, way of working, and how to interact with people all over the world (Hamdan, 2018). The beginning of the 1.0 industrial revolution began in 1750-1850 which was where human power was replaced by steam engines. 2.0 Industrial Revolution began in 1870 with the advent of electric power plants, while the 3.0 industrial revolution began in 1969 with the advent of digital technology and the Internet. In the new era of industrial revolution 4.0 began in 2018 marked by Artificial Intelligence, cloud computing, Big Data, Sensor and Automation Systems, Virtual Augmented Reality, Mobility, and the Internet of Things (IoT).

The era of the industrial revolution 4.0 has the impact of significant changes in the development of accounting, where many people from various backgrounds of new professions are worried about losing their jobs due to the emergence of this sophisticated technology. The success of this era provides a good guarantee in wading through the flow of digitalization as if at odds with the deadly threat to employment. It is certainly not independent of the presence of the industrial revolution was 4.0 which brings the role of machines and robots to do the job. Industry 4.0 as an integration of digital information with various sources and locations starting from manual activities in doing business becomes easier and more efficient (Deloitte, 2018; Utomo & Darma, 2020; Witkowski, 2017; Lee et al., 2015).

The phenomenon that occurs in Indonesia itself is that college graduates are still quite large in contributing to unemployment. Based on data from the Central Statistics Agency (BPS) the number of open unemployment in Indonesia in the August 2019 period declined but in terms of education, the unemployment rate is increasingly becoming bachelor and university graduates ranging from Strata 1 to Strata 3 who reach 737,000 people (Rahayu, 2019). The quality of college graduates can not always be accepted and able to work as expected in the world of work (Asmawi, 2005; Gallardo-Gallardo et al., 2013). This phenomenon in 2020 is very different from the previous year where there are phenomena that occur throughout the world including Indonesia, namely coronavirus disease (Covid-19). This case greatly affected all workers and educational institutions at the elementary school, junior high school, senior high school, and university level. With the appeal for work and study at home, all educational and non-educational institutions utilize technological developments to carry out activities normally.

The Industrial Revolution Era 4.0 is not just a sophisticated digital application of technology, but also requires changes in the way of thinking and working so that the need for mastering new skills that are more adaptive to the current situation (Satria, 2020). Coronavirus disease (Covid-19) accelerates our adaptation to the Industrial Revolution Era 4.0 by utilizing digital technology. Entering the digital era as it is today technology is very helpful for Educational purposes such as lecturers and students because it greatly helps the process of learning and teaching activities. The application of online lectures by universities should be appreciated during the situation against the coronavirus. In the workforce due to lockdowns, some companies require their employees to work from home (Work from Home).

This challenge is faced by the new work patterns created in the revolutionary 4.0 era where the important factor is the skills and competencies that must be improved. The challenges in a problem should be resolved as much as possible with solutions to overcome existing problems like today, where conditions like this are new challenges for students who will become college graduates to compete to win the competition in the world of work. The challenges that must be faced are created in the 4.0 industry revolution. Several new competencies are needed for college graduates to be able to adjust the work patterns of the industrial revolution 4.0. A deep understanding related to students' readiness in entering the world of work so that they have good quality performance in facing this era of the industrial revolution 4.0.

Winning competition in the world of work is determined by the competence of job seekers. The more a person has high competence, the chance to win the competition in the world of work will also increase, because they are people who have competitiveness and interest in the company (Latifah et al., 2020). Competence is needed not only in competition but in solving problems and challenges that must be faced in the world of work. Problems in the world of work are not something that only requires ability but adequate competence. The ability to do or carry out a job based on knowledge and skills by the job attitude required by the job.

Competence can be defined as the basic characteristics of someone who has a causal relationship with the reference criteria of effectiveness and excellence in a particular job or situation (Syarifudin, 2014). Competence is a basic character that indicates how to behave or think, which applies in a very broad range of situations and lasts for a long time. Higher competence requires students to attain a higher level of cognitive development to think about and use the knowledge gained (Wolcott, 2010). Accounting educators provide students with the competencies needed to succeed, by empowering all accounting graduates to advance their profession, organization, and society (Lawson et al., 2014).

According to Suttipun (2014), Competency standards from International Education Standards (IES) include ethical competencies, knowledge competencies, ability competencies, relationship competencies, and analysis competencies.

In the world of work, ethics is very important for every profession to have because in a job they are required to work by the objectives. Ethics can be stated that affects readiness because ethics can give a good influence on one's behavior in a job and provide a positive work attitude (Yousef, 2001). In addition to ethical factors, knowledge is needed in the world of work because the more adequate the competency of knowledge possessed by students, the more ready they are to apply the knowledge they have in a job. Hutapea & Nurianna (2008), state that employee knowledge also determines the success or failure of the implementation of the tasks assigned to them, employees who have sufficient knowledge improve company efficiency. Students are required to have the ability because the ability is an individual capacity to carry out tasks in a particular job (Pranata & Numeiri, 2017). Ability competence is owned by someone in the form of skills to complete their work or master the things they want to do in a job, and abilities can also be seen from the actions of each individual.

In an organization, a good relationship is needed to create a harmonious atmosphere in every existing member. Someone who has good relationship competence will create relationships that will be increasingly close and harmonious with others in making decisions and resolving cases inside the company. Several factors of competence have been explained that analysis is also one of the things that students must have to be ready to compete in the world of work. Competency analysis is needed to support accounting students in applying the knowledge they have in their work (Nurhayati & Martika, 2018; Baartman et al., 2006; Eikebrokk & Olsen, 2007). Analysis competence in this study was measured by the level of understanding and perceptions of accounting majors about students' expertise in using English language skills using information technology and operating accounting software.

Apart from competency standards from International Education Standards (IES) competency standards from International Education Standards (IES), Locus of Control can also be said as a person's perspective on an event whether he can or not in controlling events that occur to him (Lee, 2013; Fouts & Vaughan, 2002; Gilmor & Reid, 1979). Internal are individuals who believe that they are the holders of control over whatever happens to them, while external are individuals who believe that whatever happens to them is controlled by outside forces such as opportunity and luck or help from others'. Graduates who have an internal locus of control have confidence that they will achieve success if they try hard with all their abilities (Fauzan, 2019). With an internal locus of control, someone will always be optimistic and confident in facing his future, including those who have just finished their education in college.

Literature Review

Holland theory

Holland (1997), is a theory developed by John Holland that explains that the interaction of individuals with the environment can produce characteristics of job choices according to and adjustments to the work environment. John Holland’s career guidance theory tries to explain how students or individuals choose careers that are appropriate to the type, nature and psychological characteristics (personality) with an environmental model that includes a realistic environment, intellectual environment, social environment, conventional environment, business environment and artistic environment (Afandi, 2011). Students in adjusting personality types to their environment will get psychological satisfaction in undergoing a career in their lives.

Hypothesises development

Ethical competence is important to be possessed by every profession because in work requires them to work by the objectives. The better the ethical competence of Accounting Department students covering issues and accountant morals, Accounting Department student responsibilities, ability to control emotions and neutrality in attitude, will affect the readiness of Accounting Department students in the face of the Industrial Revolution Era 4.0. Research results from Nurhayati & Martika (2018), state that ethical competence has a positive and significant effect on student work-readiness in facing the ASEAN economic community. The results of the study are in line with the research of Wirianata (2018) and Hatta et al. (2016), which states that ethical competence has a significant influence on the readiness of FE Untar accounting students in facing the workforce of the MEA era.

$H_1$: Ethical Competence has a positive effect on the readiness of students majoring in accounting in facing the world of work of the industrial revolution era 4.0.
Knowledge competence is the competency possessed by someone obtained from the results of human sensing, or the result of one’s knowledge about objects through their senses which consists of several components such as the mastery of concepts, theories, methods and philosophies in certain scientific fields systematically obtained through reasoning in the process learning, work experience, research and community service related learning. The results of research conducted by Nurhayati & Martika (2018), Wirianata (2018) and Hatta et al. (2016), stated that knowledge competence had a positive and significant effect on student work-readiness in facing the ASEAN economic community.

H1: Knowledge Competence has a positive effect on the readiness of students majoring in accounting in facing the world of work of the industrial revolution era 4.0.

Competency ability is related to the skill that someone has to complete their work or master the things they want to do in a job and can be seen from the actions of that person. Adequate ability competencies possessed by someone related to intellectual abilities in the perception of a thing will make his views on something that more adequate and have an impact on his readiness to do work and deal with something. The results of research conducted by Nurhayati & Martika (2018), state that competency ability has a positive and significant effect on student work-readiness in facing the ASEAN economic community. The results of the study are in line with the research of Wirianata (2018) and Hatta et al. (2016), which states that competency ability has a significant influence on the readiness of students majoring in facing the world of work in the MEA era.

H2: Competence Ability has a positive effect on the readiness of students majoring in accounting in facing the world of work of the industrial revolution era 4.0.

Relationship competencies are competencies possessed by someone related to interaction and socialization among peers, parents, family, and social environment. A good relationship competency owned by someone can make their ability to interact with others more adequately and will have an impact on their readiness to do work and face a problem. The results of research conducted by Nurhayati & Martika (2018), Suttipun (2014) and Steelyana (2012), stated that the relationship competence has a positive and significant effect on students’ work readiness in facing the ASEAN economic community.

H3: Relationship Competence has a positive effect on the readiness of students majoring in accounting in facing the world of work of the industrial revolution era 4.0.

Analysis competence is a competency that a person has in terms of an in-depth investigation through the process of organizing, grouping data, and clarifying data to get the right facts or the actual circumstances of an event (origin, cause, actual cause, and so on). The more adequate level of analysis competency of Accounting Department students which includes language skills, information technology expertise, and expertise in the use of accounting software, will affect the readiness of Accounting Department students in the face of the Industrial Revolution Era 4.0. The results of research conducted by Nurhayati & Martika (2018), Wirianata (2018) and Hatta et al. (2016), stated that analysis competence had a positive and significant effect on students’ work readiness in facing the ASEAN economic community.

H4: Competence Analysis has a positive effect on the readiness of students majoring in accounting in facing the world of work of the industrial revolution era 4.0.

Locus of control is a concept that explains a person's perception of who determines his destiny. Locus of control is also an aspect of the personality possessed by each individual that shows each individual's beliefs about the source of the causes of the events that occur to him. Locus of control is divided into two namely internal locus of control and external locus of control. Locus of control is measured by ability, interest, and effort. Whereas the external locus of control is measured by the fate, socio-economy, and influence of others. Research Fauzan (2019), states that Locus of Control can positively influence the readiness of fresh graduates in the industrial era 4.0, it is necessary to form and develop confidence so that graduates who have just completed their studies remain optimistic in looking at the future in the industrial era 4.0. The results of the study are in line with research (Achadiyah & Laily, 2013) which states that locus of control has a positive effect on student learning outcomes.

H5: Locus of Control has a positive effect on the readiness of students majoring in accounting in facing the world of work of the industrial revolution era 4.0.

2 Materials and Methods

The population in this study were all active students of the 2017 accounting study program at the Faculty of Economics and Business, Udayana University. The sampling method in this study uses a non-probability sampling method with the type used is proportionate stratified random sampling. With the criteria that the undergraduate students majoring in accounting at the Faculty of Economics and Business UNUD 2017 for semester 6 and who will take the final semester totaling 166 people. Questionnaires were distributed using https://docs.google.com/forms. The analytical method used in this study is the multiple regression analysis. The software used as an analytical tool is Statistical Product and Service Solutions (SPSS) version 22.

3 Results and Discussions

The regression model in this study uses multiple linear regression analysis, the following in Table 1 are the results of multiple linear regression analysis.

Table 1
Multiple regression analysis testing result

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-1.783</td>
<td>1.130</td>
</tr>
<tr>
<td>Kompetensi Etika</td>
<td>0.128</td>
<td>0.044</td>
</tr>
<tr>
<td>Kompetensi Pengetahuan</td>
<td>0.132</td>
<td>0.053</td>
</tr>
<tr>
<td>Kompetensi Kemampuan</td>
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<td>0.056</td>
</tr>
<tr>
<td>Kompetensi Hubungan</td>
<td>0.097</td>
<td>0.041</td>
</tr>
<tr>
<td>Kompetensi Analisis</td>
<td>0.144</td>
<td>0.050</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>0.113</td>
<td>0.052</td>
</tr>
<tr>
<td>Adjust R Square</td>
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<td>F count</td>
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<td>F sig</td>
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Source: Primary Data Processed, 2020

The results of the $R^2$ Test can be seen in Table 1 showing that 62.3 percent of student readiness can be explained by the variables of ethical competence, knowledge competency, ability competency, relationship competency, analytical competence, and locus of control. While the remaining 37.7 percent of work readiness in accounting majors is influenced by other variables outside the regression model used. Based on the test results shown in Table 1, the Model Feasibility Test shows that the F test value of 46.412 with a p-value (Sig.F) of 0.000 is smaller than the value of $\alpha = 0.05$. This shows that the equation model in this study is feasible to use.

The first hypothesis (H1)

The t value of the ethical competency variable was 2.895 while the value of t table was 1.975 and the significance value of the t-test was 0.004 smaller than $\alpha = 0.05$ then H0 was rejected. Based on the results of the analysis showed a regression coefficient of 0.128. This shows that the ethical competence variable has a positive effect on student readiness (Peterson et al., 2006; van Rooij & Zirkle, 2016). This result means that the greater ethical competency possessed can increase the readiness of students in facing the world of work in the industrial revolution era 4.0. Based on this, the first hypothesis is accepted.

This research is in line with the research of Nurhayati & Martika (2018), Wirianata (2018) and Hatta et al. (2016), states that ethical competence has a positive and significant impact on students work readiness in facing the ASEAN economic community. This study confirms Theory holland which assumes that individuals must study the work environment by expressing attitudes, values, and accepting problems and roles that are appropriate in that environment. Following the demands of the era of the industrial revolution 4.0, accountants must have ethical competencies such as...
morals, responsibilities, and the ability to control emotions so that it will reduce the opportunity for accountants to make deviations when completing work. In strengthening ethics an accountant must be professional by increasing expertise, insight, and being open to change and maintaining good values and ethics to contribute.

Second Hypothesis (H2)

The t value of the calculated variable of knowledge competence was 2.461 while the value of t table was 1.975 and the significance value of the t-test was 0.015 smaller than α = 0.05 then H0 was rejected. Based on the results of the analysis showed a regression coefficient of 0.132. This shows that the knowledge competency variable has a positive effect on student readiness. This result means that the greater the competency of knowledge possessed can increase the readiness of students in facing the world of work in the era of the industrial revolution 4.0. Based on this, the second hypothesis is accepted.

This study is in line with the results of research conducted by Nurhayati & Martika (2018), Wirianata (2018) and Hatta et al. (2016), who state that knowledge competence has a positive and significant effect on student work-readiness in facing the ASEAN economic community. By the influence of knowledge in holland theory where this knowledge is interpreted as a person’s ability to distinguish various environmental possibilities viewed from the standpoint of his abilities, but there is a fundamental difference between judgment and knowledge, the assessment focuses on respect for himself while knowledge contains some information held someone about himself. The development of knowledge competence in the industrial era 4.0 is a very important thing to do. This is because knowledge competence not only has an impact on reducing unemployment in a country but also increasing the competitiveness of the workforce. Therefore, the Education department and the government need to provide education that is not only affordable but also relevant to the various changes occurring in the world at this time, especially in the era of the industrial revolution 4.0 which has increased rapidly due to the current globalization that is happening throughout the world.

Third Hypothesis (H3)

The t value of the variable competency ability is 2.225 while the value of t table is 1.975 and the significance value of the t-test is 0.028 less than α = 0.05 then H0 is rejected. Based on the results of the analysis showed a regression coefficient of 0.125. This shows that the ability competency variable has a positive effect on student readiness. In the concept of holland theory, every individual will look for an environment that accustoms him to practice his skills and abilities as well as the demands of workability in certain fields of work in the future. This result means that the greater the ability competency possessed can increase the readiness of students in facing the world of work in the era of the industrial revolution 4.0. Based on this, the third hypothesis is accepted.

This is in line with research by Nurhayati & Martika (2018), Wirianata (2018) and Hatta et al. (2016), which states that competency ability has a positive and significant effect on students’ job readiness in facing the ASEAN economic community. Competency ability is related to one’s expertise in completing work as seen from his actions. The more adequate the level of competence of students’ abilities will be better equipped to face the challenges of the industrial revolution era 4.0.

Fourth hypothesis (H4)

The t value of the calculated variable relationship competence is 2.327 while the value of t table is 1.975 and the significance value of the t-test is 0.021 smaller than α = 0.05 then H0 is rejected. Based on the results of the analysis showed a regression coefficient of 0.097. This shows that the relationship competency variable has a positive effect on student readiness. This result means that the greater the relationship competency possessed can increase the readiness of students in facing the world of work in the industrial revolution era 4.0. Based on this, the fourth hypothesis is accepted.

This research is in line with the research of Nurhayati & Martika (2018), Suttipun (2014) and Steelyana (2012), which states that the relationship competence has a positive and significant effect on students’ work readiness in facing the ASEAN economic community. In the Theory holland concept, various environments in which people live and work with personality types indicate that the interaction of individuals with that environment can produce characteristics of work choices and adjustments to the work environment. Based on the results of this study it can be concluded that students majoring in accounting are ready to face relationship competence in the era of the industrial revolution 4.0.

with comfort at work, an attitude of respecting rights and values of difference, cultural knowledge, ability to work in teams and tolerance.

Fifth hypothesis (H5)

The t value of the calculated analysis competence variable is 2.877 while the value of t table is 1.975 and the significance value of the t-test is 0.005 smaller than α = 0.05 then H0 is rejected. Based on the results of the analysis showed a regression coefficient of 0.144. This shows that the analysis competency variable has a positive effect on student readiness. This result means that the greater the analytical competence possessed can increase the readiness of students in facing the world of work in the era of the industrial revolution 4.0. Based on this, the fifth hypothesis is accepted.

This is in line with research by Nurhayati & Martika (2018), Wirianata (2018) and Hatta et al. (2016), which states that analytical competence has a positive influence on the readiness of Accounting Department students in dealing with the ASEAN Economic Community. In holland theory, the role of career guidance and counseling as the integration of various intellectual abilities and skills and special skills to arrive at career maturity is more specifically formulated in career guidance goals including students being able to identify various fields of education available and relevant to various fields of work. The development of information technology also requires workers to have adequate knowledge in the field of information technology because today many companies are operated by utilizing the development of information technology in the era of the industrial revolution 4.0

Sixth hypothesis (H6)

The t value of the locus of the control variable is 2.173 while the t table value is 1.975 and the significance value of the t-test is 0.031 smaller than α = 0.05 then H0 is rejected. Based on the results of the analysis showed a regression coefficient of 0.133. This shows that the locus of control variable has a positive effect on student readiness. This result means that the greater locus of control can increase the readiness of students to face the world of work in the era of the industrial revolution 4.0. Based on this, the sixth hypothesis is accepted.

The concept of Locus of Control Theory classifies individuals whether included in the internal or external locus. Someone with a high internal locus of control believes that the outcome of events is mainly influenced by one's behavior and actions. Whereas someone with a high external locus of control believes that fate or fortune determines events in their lives, including success or failure. This is in line with research Fauzan (2019), states that the Locus of Control can positively influence the readiness of fresh graduates in the industrial era 4.0. The results of the study are also in line with research by Achadiyah & Laily (2013), which states that locus of control has a positive effect on student learning outcomes. Students who feel internal control feel that they can personally influence results through their abilities, skills, and efforts. Whereas students who feel external control feel that the results they get are outside their control such as fate, socio-economy, and the influence of others.

4 Conclusion

Based on the results of the analysis and discussion of the results of this study, some conclusions can be drawn as follows: Ethical competence has a positive effect on the readiness of students majoring in accounting in facing the world of the industrial revolution era 4.0, Knowledge competence has a positive effect on the readiness of students majoring in accounting in dealing with the revolutionary era of work. Industry 4.0, competence ability has a positive effect on the readiness of students majoring in accounting in facing the world of work of the industrial revolution era 4.0, the competence of relations has a positive effect on the readiness of students majoring in accounting in dealing with the world of industrial revolution era 4.0, competency analysis has a positive effect on the readiness of students majoring in accounting in the face of the world of work of the industrial revolution era 4.0, Locus of control has a positive effect on the readiness of students majoring in accounting in facing the world of work of the industrial revolution era 4.0.

Further research can also be done by expanding the scope of students who are respondents. One way is to take respondents majoring in accounting from several universities. Besides, student respondents can also be selected from students in each class to be able to see differences in the level of competency of students majoring in accounting and the level of their readiness in facing the world of the industrial revolution era 4.0.
Conflict of interest statement
The authors declared that they have no competing interests.

Statement of authorship
The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

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