



## E-Business Ethics Learning Effectiveness to Build Ethical Awareness, Moral Courage, and Ethical Decisions

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### ABSTRACT

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**Purpose:** This study aims to determine the effectiveness of the use of E-Business Ethics Learning which is being built in forming ethical awareness, moral courage, and ethical decisions by comparing ethical awareness, ethical courage, and ethical decisions of students in business and professional ethics courses using E-Business Ethics Learning. with students who only read the text with the same case.

**Patients and methods:** The design of this research is quantitative research with an experimental method. The data collection technique was carried out using an online survey using the google form application. Samples were taken from students who were taking courses in business and professional ethics. The data analysis technique was carried out by conducting different tests on the average scores of ethical awareness, ethical courage, and ethical decision-making between students who used E-Business Ethics Learning and those who did not.

**Results:** The results showed that there were differences in ethical awareness and ethical decision-making between students who used E-Business Ethics learning and those who did not use E-Business Ethics Learning. This study found no evidence of a difference in moral courage between the two groups. This study also gave unexpected results that the mean rank of ethical awareness and ethical decision-making in the group of students who read the text was higher than the mean rank of the group of students who used E-Business Ethics Learning.

**Conclusion:** The results showed that there was no difference in ethical awareness, moral courage, and ethical decisions between students who used E-Business Ethics learning and those who did not use E-Business Ethics Learning

### Keywords:

E-Business Ethics Learning, Ethical Awareness, Moral Courage, Keputusan Etis, Etika Bisnis

### 1. INTRODUCTION

Many business practices tend to prioritize only their own interests rather than the interests of the wider community. The case of manipulation of financial statements by PT. Garuda Indonesia in 2018, cases of manipulation of Covid-19 death data, and cases of cartels in trading livestock and agricultural commodities, are some examples of cases of business ethics violations that occurred in Indonesia. This case of violation of business ethics shows that entrepreneurs only care about their interests, which may want to save their business or maybe also take the opportunity to get the maximum profit.

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The entrepreneur wants to compete with other entrepreneurs in dirty ways. Agoes and Ardana (2009:124) say that currently, entrepreneurs view the business world as full of competition; those s weak will lose in competition and those who are staring will excel in competition.

According to Agoes and Ardana (2014), there are five principles of business ethics, namely the principle of autonomy, the principle of honesty, the principle of justice, the principle of mutual benefit, and the principle of moral integrity. These principles will be a guide for business people to run their businesses so as to create mutually beneficial business transactions. Cases of violation of business ethics will have an impact on the integrity of professionals, especially accountants. Management accountants are involved in preparing the company's financial statements, internal auditors play a role in overseeing the effectiveness of the company's internal controls, and external auditors play a role in providing assessments of financial statements. As a professional, accountants and auditors are bound by a

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professional code of ethics so they must be careful in carrying out their work. However, when they are in a difficult situation because there is pressure from management who do not run their business ethically, this will shake accountants in carrying out their duties professionally.

The task of an educational institution, of course, must be in line with the needs in the world of practice. The declaration of the Independent Learning Campus Merdeka (MBKM) by the Ministry of Education of the Republic of Indonesia has encouraged educational institutions including universities to improve in educating students to quickly adapt in practice. This program is expected to encourage students' independence in learning. Learning from practice does not mean having to completely imitate existing practices but the most important thing is how to make bad practices can be improved into good practices. An unethical business can be turned into an ethical business. Hang (2022) found problem-solving, general, and synthetic thinking skills have a positive and meaningful impact on the effectiveness of learning Vietnamese idioms. This research confirms that the role of cognitive techniques for learning is important to learning things.

The occurrence of the Covid-19 pandemic has forced schools to run online learning and changed their learning model to a digital-based learning model. Digital-based learning (e-learning) has become a necessity today, in addition to face-to-face restrictions, digital-based learning has become a more attractive choice of teaching method. In the context of teaching delivery, not all materials can be delivered digitally but at the very least, digitization will make it easier for lecturers and students to carry out the learning process. Digital transformation does not only use technology in the learning process but also requires students to be able to think computationally or better known as Computational Thinking (CT). CT will be one of the competencies that every student must possess in the future. CT is a thought process that is needed in formulating problems and solutions, so that these solutions can become effective information processing agents in solving problems (2011, Jeannette accessed from <https://sokrates.id/2020/02/04/transformation-digital-dalam-education-World/>). Phuong (2022) found the process of using the application to learn English, students felt the positive aspects.

This study aims to examine the effectiveness of business ethics learning through e-learning in increasing the ethical awareness, moral courage, and ethical decisions of students. The results of the study are expected to be useful for evaluating the effectiveness of the use of E-Learning Business Ethics by observing changes in attitudes toward ethical issues. This attitude is viewed from the ability of students to be aware of ethical issues, the courage to take ethical actions, and ethical decision-making. In this regard, this research proposes the following problem formulation:

1. Is there any difference in ethical awareness between before and after using E-Learning?
2. Is there a difference in moral courage between before and after using E-Learning?
3. Is there any difference in ethical decision-making between before and after using E-Learning?

## II. THEORETICAL REVIEW

### Digital Transformation

The Industrial Revolution 4.0 was initiated in 2011 in Germany, and this thought became more prominent when in 2015, Angela Merkel introduced the idea of the Industrial Revolution 4.0 at the World Economic Forum (WEF). RI 4.0 applies the concept of automation carried out by machines without the need for human labor in its application. This is something that is very important for industry players to improve time, labor and cost efficiency. The application of the Industrial Revolution 4.0 in factories is currently also known as Smart Factory. Not only that, currently data retrieval or exchange can also be done on time when needed, via the internet network so that the production process and bookkeeping running at the factory can be authorized by interested parties anytime and anywhere as long as they are connected to the internet.

The emergence of RI 4.0 gave birth to a digital transformation. According to Wikipedia, digital transformation is part of a larger technological process ([https://id.wikipedia.org/wiki/Transformasi\\_digital](https://id.wikipedia.org/wiki/Transformasi_digital) accessed January 19, 2022). Digital transformation is a change related to the application of digital technology in all aspects of people's lives. Digital transformation is the third stage in the digital technology path as shown in the path starting from digital competence, digital use, and digital transformation. Digital transformation includes transformative uses and capabilities in terms of informing digital consciousness. The transformation stage is the stage of using digital processes that allow innovation and creativity in a particular digital product, not only enhancing it but also supporting traditional methods.

The existence of digital transformation also affects the educational process from elementary to university levels. The challenges of the world of education which are getting tougher also add to the reason, one of which is the lack of maximum synergy between the world of education and the business world, and the industrial world. Digital transformation in the world of education is one way to answer these challenges. The digital generation must be "literate" with digital and of course, digital transformation is one of the first steps for independent learning. Utilization of technology in a learning process will certainly have an impact on changing student behavior towards the desired learning achievement.

**Electronic-Based Business Ethics Learning (E-Business Ethics Learning)**

Responding to technological developments with this digital transformation, we have tried to design e-learning for business and professional ethics courses at the Sanata Dharma University Accounting Study Program. We created this technology using a case-based learning model that was created digitally. We made this application using funding from IAJBS (International Association of Jesuit Business School).

Case-based learning has long been known in the world of education, especially in business education, namely accounting, and management. This is done because there are many criticisms from graduate users that students are not equipped with the skills needed in practice (Jogiyanto, 2007: 1). Jogiyanto (2007) said that learning by using the case method will be able to transfer knowledge as well as wisdom. Learning with this case method will work well if students are actively involved in the learning process. So that students are interested and actively involved in this learning process, an interesting learning media is needed. One of the learning methods that are currently widely used is to use electronic learning (e-learning).

Electronic-based business ethics learning (E-Business Ethics Learning) is a learning method that combines case learning and electronic learning. In the learning process, the traditional case method begins with reading and understanding the case effectively and efficiently, then students analyze the case. However, this electronic-based learning, starts with students watching videos related to violations of business ethics and then students are guided with certain questions that have been designed so that students can provide responses and reflections on cases that have just been watched.

In Figure 1, the following are some of the features of electronic-based business ethics learning that we have compiled.



**Business Ethics**

Haryatmoko (2003) in Sihotang (2016:58) states that ethics can be equated with morals. He stated that the function of

moral teachings is to train individuals to do good, so it can be interpreted that moral teachings will lead someone to become more ethical. It is different from Suseno and Zubair (in Sihotang, 2016: 59) who consider ethics to be different from morals. Suseno (in Sihotang, 2016) says that ethics is not an additional source for moral teachings, but critical and fundamental thinking about moral views. This opinion is corroborated by Zubair that morality is used to assess actions, while ethics is used to examine the existing value system.

In this day and age, a business cannot be separated from ethics. However, some people still have the view that business cannot be directly related to ethics. Business is full of competition so who will win the competition is a strong business person. In this paradigm it is interpreted that business competitors are considered as enemies that must be defeated. However, nowadays, this view begins to fade when business people feel they cannot live without other business people. Therefore they must work together to achieve a common goal. Currently, business people have begun to realize that they need a high moral commitment in running their business. Many companies that ignore moral values, seek to maximize profits and damage the environment, become bankrupt because they are not trusted by society. Therefore, in order for a businessman to succeed in managing his business, he must use ethical values in every business activity.

Some experts try to explain some of the principles of business ethics. According to Lawrence, Weber, and Post (2005), the principles of business ethics include honesty, keeping promises, helping others, and respecting the rights of others. While Weiss (2006) states that the principles of business ethics include dignity/rights, obligations, fairness, and justice. Keraf (1998) identified five principles of business ethics that can be used as guidelines for running a business. The five principles of business ethics include:

**a. Autonomy Principle**

This principle includes an attitude of independence, freedom, and responsibility. This principle will foster a chivalrous attitude in doing business which is reflected in being brave in acting but having a big heart in admitting mistakes and having the courage to bear the consequences.

**b. Honesty Principle**

This principle is reflected in the attitude of complying with the agreed commitments, contracts and agreements. With this principle, business networks and cooperation will be built based on mutual trust between business people and their partners.

**c. Principle of Justice**

This principle relates to the attitude of not discriminating both from the economic aspect (related to income distribution), legal aspects, and other aspects such as religion, race, ethnicity, and gender.

**d. The Principle of Mutual Benefit**

This principle is in line with the principle that emphasizes the responsibility of business people to the interests of stakeholders.

**e. Principles of Moral Integrity**

This principle underlies an attitude that recognizes that doing business requires mutual respect for the dignity of the people involved in the business activities

**Hypothesis Formulation**

Studies on the influence of personal factors on ethical decision making have been carried out by Ameen et al. (1996), Mason and Mudrack (1996), Cohen et al. (2001). Ameen et al. (1996) and Mason and Mudrack (1996) found that women were able to act more ethically than men. Furthermore Cohen et al. (2001) found that the higher a person's level of education, the lower awareness of ethical issues.

Work as an accountant is very vulnerable to violations of the accountant's professional code of ethics. Therefore, the ability to make ethical decisions is indispensable for graduates of the accounting study program. In line with its vision and mission which is in line with USD's vision and mission, the accounting study program aims to produce graduates in the accounting field who are expected to have a high awareness of ethical issues, especially those related to financial reporting.

Previous studies, such as Cohen et al. (2001) stated that undergraduate students who are currently studying have the highest ethical awareness, then at the lower level are students who have just graduated from bachelor's and those who have the lowest ethical awareness are professionals. The results of this study are in line with Ponemon (1992) who found that auditors with higher positions showed a decrease in moral judgment capacity. The results of the studies above show that the higher the level of experience and education, people actually have a lower level of ethical awareness. This contradicts the moral developmental theory of Kohlberg (1958), quoted by Ponemon (1992).

As quoted by Thorne, Massey, and Magnan (2003), Kohlberg (1958) states that there are three levels of moral development, namely pre-conventional (moral accessibility of alternative actions is defined by linking punishment and rewards to various outcome options), conventional (moral accessibility of alternative courses of action based on interpretations of group norms), and post-conventional/principled (influenced by ideas of universal reasonableness rather than legal, social, or material implications for oneself).

The results of Thorne et al. (2003) showed that the ethical reasoning perspective is a perspective that can be used to explain the resolution of ethical dilemmas by auditors. This means, when the individual (auditor) makes ethical decisions, he is influenced by various contextual factors that may

influence the emergence of the decisions taken. On the other hand, Hannah et al. (2011) stated that a person's ability to make ethical decisions is determined by the moral capacity which includes moral cognition and moral conation that he has.

Hannah et al. (2011) stated that the diversity of ethical decision-making patterns is caused by the moral capacity possessed by each individual. This moral capacity will affect how they process, make judgments and respond to moral challenges. Hannah et al. (2011) explained that in addition to moral cognition, there is also the role of moral conation in ethical decisions taken by individuals. Moral connotation is the capacity to generate responsibility and motivation to take moral action when facing adversity and persisting in difficult situations.

So, based on the model of moral maturation and moral connotation developed by Hannah et al. (2011), each individual experiences moral cognition processes that will determine the way the individual makes decisions. The process of moral cognition includes moral sensitivity and moral judgment. The process of moral cognition will be determined by the capacity of moral maturation which includes moral complexity, meta-cognitive ability and moral identity. In addition to the process of moral cognition, ethical decision-making also involves a process of moral cognition which includes moral motivation and moral action. Actions in the form of moral motivation and moral action are determined by the capacity of moral connection which includes moral ownership, moral efficacy and the ability to face difficulties (moral courage).

Ethical awareness is the interpretation of situations or issues regarding events that contain ethical problems (Shadnam and Lawrence, 2011). According to Rest (1994), a person's ethical awareness will lead to ethical judgments, which will then lead to the intention to act ethically, and then to take ethical actions. Ethical attitude is related to the intention to act ethically. This intention is related to the individual's attitude to choose ethical values compared to other values). The intention to act ethically is influenced by one's assessment of ethical values. This ethical judgment relates to the decision to choose an ethical course of action. A person's ethical awareness and ethical attitude can be measured by a person's ability to give an assessment of a case that has the potential to cause ethical violations. This assessment is based on how well a person applies existing ethical principles. The ethical principles used to measure the level of ethical awareness and attitude are the ethical principles proposed by Keraf (1998) including the principles of autonomy, honesty, fairness, mutual benefit, and moral integrity.

The learning method is also a factor that motivates students to study lecture material. Attractive learning methods will encourage increased learning effectiveness so that learning outcomes will be achieved more quickly. The

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electronic-based learning method that the researchers developed is also expected to motivate students to study business and professional ethics courses. Therefore, the hypothesis can be formulated as follows:

**H1: There is a difference in the level of students' ethical awareness before and after they use E-Business Ethics Learning**

**H2: There is a difference in the level of students' moral courage before and after they use E-Business Ethics Learning**

**H3: There is a difference in the level of students' ethical decisions before and after they use E-Business Ethics Learning**

## III. RESULTS

### A. Data Description

This research was conducted through a survey method with student respondents who are taking business and professional ethics courses in the even semester of the 2021/2022 academic year. The number of respondents who filled out the questionnaire was 183 respondents, which were divided into two groups: 103 respondents were asked to read cases of ethical violations from the text provided, and 80 respondents were asked to read cases of ethical violations through e-business ethics learning. Students who are asked to fill out the questionnaire are students who are taking courses in Business and Professional Ethics. Demographic data of respondents are presented in table 1.

**Table 1. Demographic data of respondents**

Category	Total respondents	Percentage (%)
<b>Age (Years)</b>		
17-18	45	24,6
19-20	132	72,1
21-23	6	3,3
<b>Gender</b>		
Woman	132	72,1
Man	51	27,9
<b>Treatment</b>		
Reading Text	103	56,3
E-Business Learning	80	43,7

Based on table 2, it can be seen that the minimum values of the variables of ethical awareness (KE), moral courage (KM), and ethical decision making (PK) are 2.33; 2.67; and 2.76. The maximum value of the variables ethical awareness (KE), moral courage (KM), and ethical decision making (PK), all of them are 5. The average value of the variables ethical awareness (KE), moral courage (KM), and ethical decision making (PK) respectively are 4.08; 4.20; and 3.75. Based on the average value of all tested variables, most

of the respondents tend to have high values of ethical awareness, moral courage, and ethical decision making.

**Table 2. Descriptive Statistics**

Description	KE	KM	PK
Minimum	2.33	2.67	2.76
Maximum	5.00	5.00	5.00
Mean	4.08	4.20	3.75
Std. Deviation	0.63	0.47	0.37

### B. Data Analysis

In order to prove the hypothesis, this research conduct average difference statistical tests to find out whether there is a difference the level of ethical awareness, moral courage, and ethical decisions. Based on normality test, the result show that the data is not normal, so this research use nonparametric test to analyze the data.

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of KE is the same across categories of Teko=0/Video=1.	Independent Samples Mann-Whitney U Test	.000	Reject the null hypothesis.
2	The distribution of KM_Adj is the same across categories of Teko=0/Video=1.	Independent Samples Mann-Whitney U Test	.113	Retain the null hypothesis.
3	The distribution of PK is the same across categories of Teko=0/Video=1.	Independent Samples Mann-Whitney U Test	.037	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

**Fig. 1 Results of Differential Tests with Nonparametric**

The test results above show that only the KM variable shows a value that does not differ between respondents who are asked to read the case in text form and those who are asked to watch a video. The results of this different test indicate that the respondents showed different EC and PK between those who were given the case in text form and those who watched the video.

The difference between the KE and PK score levels between the group of respondents who read the text of the accounting violation case and the group of respondents who watched the video about the same case can be seen from table 3.

**Table 3. Descriptive Statistics**

	Teko=0/Video=1	N	Mean Rank	Sum of Ranks
KE	.0	103	107.56	11078.50
	1.0	80	71.97	5757.50
	Total	183		
KM_Adj	.0	103	97.45	10037.00
	1.0	80	84.99	6799.00
	Total	183		
PK	.0	103	99.19	10217.00
	1.0	80	82.74	6619.00
	Total	183		

#### **IV. DISCUSSION**

The results of hypothesis testing indicate that hypothesis 1 and hypothesis 3 are supported, while hypothesis 2 is not supported. This means that there is a difference between the scores of ethical awareness (KE) and ethical decision-making (EC) scores between the group of respondents who read the text of the accounting violation case and the group of respondents who watched the video. The results of this test indicate that the mean rank variable for ethical awareness and ethical decision making for the group of respondents who read the text tends to be higher than the score for the group of respondents who watch the video. This means that respondents who read texts tend to have higher ethical awareness and ethical decision making than respondents who watch videos.

The results of the mean rank test for the two groups indicate that the results do not match what was previously predicted. The allegation that ethical learning using E-Business Ethics Learning will make students more ethically aware, moral courage, and ethical decision making than students who only read cases is not proven. These results can occur due to individual behavioral factors in using the system. Jogiyanto (2007) says that an information system that is developed can fail to be implemented when the system is not really acceptable to the user. Information technology applied in an organization must really pay attention to the behavioral aspects of its users. The behavioral aspect is an important factor that must be considered by the system maker so that the purpose of implementing a system can achieve its goals. This opinion was conveyed by experts who adhere to the flow of behaviorism (Jogiyanto, 2007: 3).

The atmosphere experienced by respondents when using E-Business Ethics Learning will greatly affect their ability to understand the case. Jogiyanto (2007: 14-15) discusses theories and models of behavioral information systems. Behavioral information systems study how organizations should develop an information technology system to direct the behaviors of individuals in interacting with the information technology system to help achieve their goals. The behaviorism focuses on the acceptance, adoption, and use of the information system.

Based on the behavioral information system approach, there is an assumption that the user or respondent may not be able to fully feel the ease of using the system. In addition, based on the technology acceptance model (TAM), perceived usefulness, perceived ease of use and subjective norms affect the user's interest in using information systems.

#### **V. CONCLUSION**

The results of this study show evidence that there is a difference in the level of ethical awareness and ability to make ethical decisions between the group who were asked to read the text about the case of accounting violations and the group that was asked to watch the video, while the ethical

courage of the respondents did not differ between the two groups.

However, the results obtained are that the mean rank for the group who reads the text is higher than the mean rank for the group who watches the video in cases of accounting violations. This result is not in line with what was expected or predicted. These results indicate that there are other factors that influence it. According to experts who use the flow of behaviorism, a system that is applied will be influenced by the behavior of the people who use the system. The atmosphere experienced by respondents when using E-Business Ethics Learning will greatly affect their ability to understand the case.

The limitation of this study is that this study does not test whether the respondents feel that E-Business Ethics Learning is useful, easy to use, and the characteristics of the respondents are related to the acceptability of the system so that these factors cannot be controlled in testing the outcomes of using the E-Business Ethics Learning. Based on the limitations that have been stated above, the next research needs to accommodate the behavioral aspect in testing the success of achieving the goals of the E-Business Ethics Learning.

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#### **VII. DISCLOSURE**

The authors report no conflicts of interest in this work.

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