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Learning Satisfaction Analysis of Online Learning Readiness with Learning Culture and Character Strength as Antecedent Variables

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Abstract. The industrial era 4.0 that occurred has had a general impact on all human work activities, including the world of higher education. This study aims to disclose and analyze learning satisfaction with online learning readiness with learning culture and character strength as antecedent variables. Data collection was carried out by using an online questionnaire for all students of Putra Indonesia University who attended elearning lectures in the 2018-2019 academic year, with a total of 320 students.

The findings of data analysis with structural equation modeling (SEM) using Smart PLS, indicate that learning culture, character strength and learning satisfaction can explain its effect on online learning readiness. Furthermore, this study also concluded that learning culture and character strength were able to explain the satisfaction of learning online learning. In addition, the findings of this study also indicate that learning satisfaction is not able to mediate the influence of learning culture and character strength on online learning readiness.

1. INTRODUCTION

The emergence of the 4.0 industrial era has become a challenge and opportunity that can encourage innovation and creation in all sectors of work, including the world of education. Therefore the Government needs to consider the relevance of the application of distance learning (*online*) and respond to changes, challenges, and opportunities while taking into account *humanities*. One approach that can be applied in implementing learning in Higher Education (PT) is distance learning (PJJ) throughlearning *online* (*Elearning*). The concept of *e-learning* is an era of transformation of conventional educational activities into digital forms both in*contents* and systems. This learning model is believed to be able to help and encourage world education institutions to be able to improve service and learning processes more flexibly without being limited by time, geographical location and student presence on campus. In English it is known as 'online learning', 'e-learning', 'web-based learning' which basically refers to 'learning in the network.' Dabbagh & Bannan Ritland (2005, p. 15) online learning is explained as' open learning distributed through internet networks or Web-based networks, to facilitate learning and development of knowledge through meaningful interaction and learning activities.

Even though at the beginning of the emergence of many people doubted and witnessed that this learning model could eliminate *humanities*, interactions between students and their lecturers. The results of research in several countries found a tendency for *drop-out* students as participants *elearning*, such as the Park & Choi (2009) study, which stated that *drop-out rates* student reached

54% in America, while the Nistor & Neubauer (2010) study *drop-out* students in Germany reached 23.9%. Therefore, it needs high attention for educational institutions to be able to increase the readiness of online learning not only from the point of view of their students, but also related to the readiness of all existing elearning service provider components. Both from the existing infrastructure and related to human resources owned by the institution, in order to maximize the achievement of student learning outcomes in college.

This study tries to find out and analyze the factors that influence the readiness of learning *online* for students at University of Putra Indonesia YPTK Padang in participating in learning *online*. Preliminary observations on students at University of Putra Indonesia YPTK Padang, about how students perceive themselves to be able to manage changes in patterns and ways of interaction of lecturers in the use of information and communication technologies that are directly related to student readiness in online learning, indicate a degree of student readiness in online learning. Even though at the initial stage, it takes time and socialization for students and lecturers, related to the technical use of information technology which is a bit complicated. However, along with the time of elearning learning the benefits began to be felt for students and lecturers including educational institutions. So that the quality of online education is able to provide better achievement of educational goals.

Kaminski, Switzer, & Gloeckner (2009), states that the quality of student interaction in learning depends on the technology used and the ability or readiness of students to use information technology. Research related to online learning readiness conducted by Kaur & Zoraini (2004), shows that only one third of students feel ready for e-learning at the Open University of Malaysia. Hung's findings, ML et al. (2010) which examined participants' readiness to conclude that high student readiness was in self-efficacy, motivation to learn. Furthermore, Cigdam and Yildirim's (2014) study of the online learning habits, found that overall students had readiness in online learning, but they had to improve their self-efficacy towards computers and their self-efficacy in online communication.

From this description the study sought to analyze interaction readiness to learn *(readiness)* online learning students by making learning culture, strength of character and satisfaction of learning as a determinant factor in predicting online learning readiness of students at the University of Putra Indonesia YPTK Padang.

2. LITERATUR REVIEW

The concept of online learning began to be introduced along with the increase in the use of technology both among educators and students. The aim is to streamline the learning process, and reduce the limitations that are often encountered in the learning process, in relation to the flexibility of time and place. According to Allen (2013), E-Learning is learning that is structured with the aim of using electronic systems or computers so that it can support the learning process. E-learning (electronic learning) can also be regarded as one aspect of the application of ICT in the world of education in the delivery of learning content or electronic learning experiences using computers and computer-based media. Today in the world, more than a thousand institutions in 50 countries have used e-learning to support their learning activities (Bhuasiri et.al, 2012).

Readiness for online learning is defined as mental or physical readiness of an organization or individual for learning experiences (Borotis & Poulymenakou, 2004). Readiness of online learning is very important because in the implementation of e-learning there are often various obstacles (resistance) such as resistance, computer literacy, limited human resources, infrastructure to organizational culture (Mungania, 2003). In addition, the elearning model itself is designed to simplify the process of obtaining basic information needed in developing e-learning. Therefore, online learning readiness must also be the main concern of the organization before deciding to implement e-learning.

Satisfaction is the feeling of being happy or disappointed someone who appears after comparing the performance (results) that are thought of the expected performance (or results). Own satisfaction is the result of differences between expectations and perceived performance (Londong, 2012). When attending online learning, students will personally assess whether they are satisfied or dissatisfied with the learning process that they are going through (Robbins & Judge, 2007). Learning satisfaction is an affective element that occurs when students feel there is consistency between hope and experience. In

other words, students who have a high level of satisfaction in their learning activities, it is certain that they will also have high readiness in learning online. If the expectations are met or the reality experienced exceeds expectations, then students feel learning satisfaction (Chang & Chang, 2012).

Culture is a system of values and beliefs that interact with people in an organization, organizational structure and control systems that produce behavioral norms (Pabundu, 2006). Learning culture is a reflection of the quality of academic life that grows based on the enthusiasm and values embraced by an educational institution, environment, atmosphere, taste, and climate that is able to develop intelligence, student skills that are expressed in the form of cooperation in discipline, responsibility, and motivation to learn. A student who has a high learning culture will always prepare himself to be able to learn to the fullest, which will directly have habits that support a high level of learning readiness in all his activities at school.

Another factor that is also thought to determine the level of readiness for online learning, is the strength of character. Character strength is as a form of value or potential possessed by someone or learner who can support the implementation of his teaching and learning activities. Peterson and Seligman (2004), character strength is a psychological element that includes processes and mechanisms, which provide definitions of virtue. Character strength is defined as a mental process that helps a person to think and behave in ways that can improve the quality of work and their life experiences, and increase interest in their environment (McCullough & Snyder, 2000, in Litman & Davidovitch, 2010). Through character strengths such as interest, talent and motivation, students will have the ability to understand and follow an online learning model. In other words, the strength of character possessed by students will be able to direct all attitudes and behaviors to readiness for online learning. Therefore the strength of character is also considered as a reflection of a person's potential to achieve personal welfare and contribute to the workplace and the environment around them (Peterson & Seligman, 2004).

From the description above, the hypothesis in this study relates to the direct influence of learning culture, character strength and satisfaction with online learning readiness both directly and indirectly by making the satisfaction variable an intervening variable. The following is a description of *path analysis* from the study:
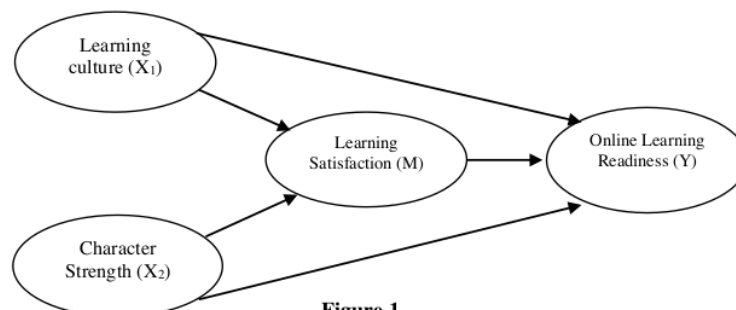

Figure 1
Path Analysis

3. RESEARCH METHODOLOGY

This study had a sample of 367 students from Putra Indonesia University YPTK Padang who came from the faculties of Computer Science, Teacher Training and Education and Engineering faculties. Data collection is done by distributing questionnaires through the help of Google Form.

This study has 2 (two) exogenous variables, namely learning culture and strength of character, 1 (one) intervening variable namely learning satisfaction and one endogenous variable, namely readiness to study online. Learning culture is a reflection of the quality of academic life that grows based on the spirit and values possessed by students in helping and improving student learning achievement. This variable is measured using a questionnaire developed by Santosa 2017, which has indicators of influence, training and readiness. While the variable strength of character is a picture or

self-potential inherent in students to support readiness for online learning. This variable was measured using a questionnaire developed by Peterson and Seligman (2004) with variable indicators including: curiosity, love of learning, openness of mind, creativity, and perspective.

Furthermore, the variable of learning satisfaction is a form of feeling happy or unpleasant that exists in students in participating in online learning. This variable was also assessed using a questionnaire adopted from the Bora (2017) study. While the online learning readiness variable is a picture of learning readiness that is owned by students in participating in online learning. This variable was measured using a questionnaire developed by Pillay & Tones (2007) with indicators in the form of technical skills, computer self-efficacy, learning preferences and attitudes toward computers. The model of this study used themodel *Structural Equation Modelings* with SmartPLS 2.0 M3 tools. The wold in Ghozali (2008) *Partial Least* Square *(PLS)* states thatanalytical methods *powerful* because they are not based on many assumptions. Among the advantages possessed by *Partial Least* Square *(PLS)* include: data does not have to be *normally multivariate,* indicators can be categorized, ordinal, interval to ratio can be used on the same model) and sample size does not have to be large. Evaluation of research hypotheses is done through t-Statistic value or t count compared to t table value of 1.96 for rejecting data at alpha 5%. If the t value is>> 1.96, the hypothesis is accepted and if the t value is <<1.96 then the hypothesis is rejected (Ghozali, 2008).

3. RESULT AND DISCUSSIONS

The results of the frequency distribution test related to the characteristics of respondents in this study can be described as follows:

Characteristics of the research respondents are profiles that are inherent in the employees student in University of Putra Indonesia YPTK Padang which in this case include gender, age, education level, and working period.

Table 1. Characteristics of Research Respondents

Remarks	Number of	Percentages (%)
Gender		
Male	235	64,0
Female	132	36,0
Faculty of origin Students		
of Computer Science	278	75,7
Teacher Training and Education	22	6,0
Engineering	67	18,3

Source: Attachment of Data Processing Results, Year 2019

Based on the results of frequency calculations from the characteristics of respondents, an overview of the characteristics of the students of Putra Indonesia University YPTK Padang who participated in online learning in the 2018/2019 academic year was found. From the gender side of 367 students who were the sample of this study, 235 people or 64% had male sex and the remaining 132 or 36% were female. While when viewed from the faculties of each student, generally students who take online learning come from computer science faculties which are more than 75% or 75.7% and the rest come from the teaching and education faculties as well as from the engineering faculty each of them 6% and 18.3%.

Furthermore, the results of the assessment of respondent's answer level (TCR) on each of the research variables can also be explained in the following table:

Table 2. Level of Achievement of Respondent Answers (TCR) Research Variables

No	Item Statement	Average Score	TCR	Category
1	Readiness to study online	3.98	79.63	Good enough
2	Learning culture	3.96	79.11	Good enough
3	Character strength	3.92	78.41	Good enough
4	Learning satisfaction	3.94	78.80	Good enough

Source: Appendix of Data Processing Results, Year 2019

Results of calculation of respondent's achievement level (TCR) in Table 2 above, following the classification of answers respondents according to Arikunto (2002). Where the average score of students' online learning readiness variables in attending online learning is in the fairly good category. While the level of learning culture that students have in supporting online learning also looks quite good. Furthermore, the character strength in students who also contribute in supporting online learning readiness is also in a fairly good category. While for the learning authorities related to learning followed by students, currently satisfaction is also reflected in the fairly good category.

Furthermore, the results of research hypotheses testing using Smart PLS will be explained in 2 parts, namely: *Path analysis* and table *result for inner weights*. Where both *of outputs* these will explain the relationship between exogenous variables to exogenous variables (organizational culture, strength of character and satisfaction of learning) both directly and indirectly. The following *is the output* Smart PLS:
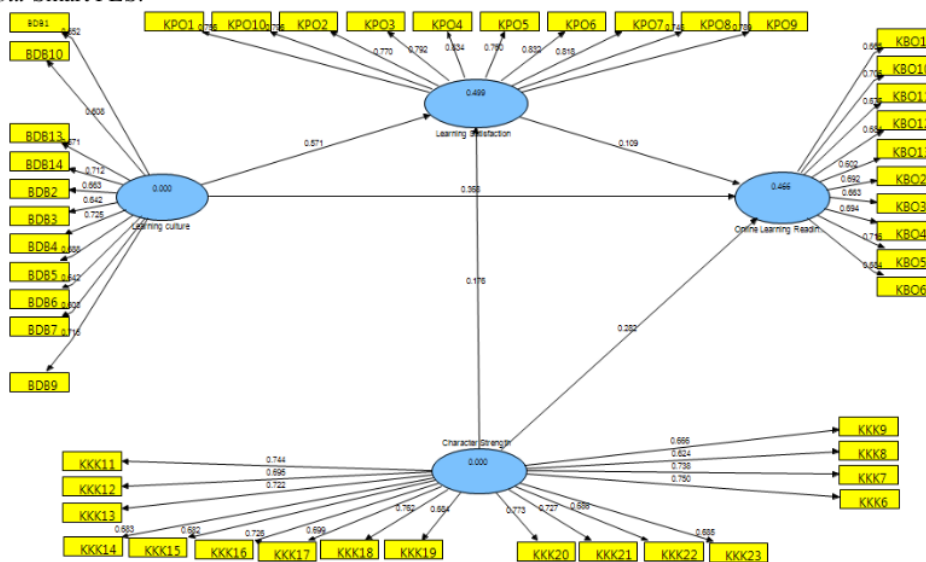

Figure 1. Path Analysis

Source: Attachment of Data Processing Results, 2019

From the path of the analysis, it is seen that each construct or variable is built by each item statement, where for the learning culture variables constructed by 14 items are 3 items invalid items 8, 11, & 12 because the convergent value of validity is <0.5, (Jogiyanto and Abdillah, 2009). Furthermore, for character strength variables constructed by 23 items of statements, as many as 6 invalid items, namely items 1, 2, 3, 4, 5 and 10 because they have convergent values of validity <0.5. For learning satisfaction variables built by 10 items all statements are valid and for online learning

readiness variables built by 13 items of statements, where as many as 13 items invalid statements are items 8, 9, 10 because they have convergent values of validity <0.5.

Next is the *result for inner weights, the* part that will explain the research hypothesis both directly and indirectly influence:

Table 2. Result For Inner Weights

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics	Description
Learning Culture -> Online Learning Readiness	0.368	0.088	4.193	Accepted
Character Strength -> Online Learning Readiness	0.282	0.067	4.184	Received
Learning Satisfaction -> Online Learning Readiness	0.109	0.064	1.695	Accepted
Learning Culture -> Learning Satisfaction	0.571	0.069	8.251	Received
Character Strength -> Learning Satisfaction	0.176	0.085	2.055	Received

Source: Attachment of Data Processing Results, 2019

1. Effect of Learning Culture on Online learning Readiness

    The *results for inner weights* with SmartPLS in the table above show positive and significant influences learning culture towards online learning readiness for students at University of Putra Indonesia YPTK Padang. Where the regression coefficient is 0.368 with a t-statistic value of 4.193, if t-statistic value is compared with t-table 1.96 on the error rejecting the 5% data then 4.193> 1.96. This means that the hypothesis can be accepted or proven. This finding is also in line with the level of achievement of the respondents' answers where the learning culture values possessed by students can support online learning readiness with a fairly good category. These results are in accordance with the opinion of Slameto (2010), which explains that one of the readiness in learning is determined by the needs, motives and goals, one of which is the value of the culture of student learning in participating in learning. Thus it can be concluded that learning culture is one of the factors that determines online learning readiness in industry 4.0

2. Effect of character strength on online learning readiness

    findings *Results for inner weights* in the table above, it can be seen that character strength has a positive and significant effect on students' online learning readiness University of Putra Indonesia YPTK Padang. With a regression coefficient of 0.282 with a t-statistic value of 4.184, if the t-statistic value is compared with t-table 1.96 on the error reject the 5% data then 4.184> 1.96. Thus it can be concluded that the character's strength determines the readiness of online learning. The results of the assessment of respondent's achievement level (TCR) also support the level of online learning readiness, where generally students with character strength who are already in a fairly good category are able to support readiness to change in online learning. Another evidence that can also be revealed is that there is no strength of character with all indicators that build this variable between students in each faculty at Putra Indonesia University YPTK Padang can be united by the value of 12 principles that become values and characters on campus. According to Sutikno (2009) one of the psychological factors that influence student learning is learning readiness. Hung's research findings, ML et al. (2010) who examined the readiness of online student learning participants in Taiwan, concluded that students' readiness in learning was high for the category of computer / internet self-efficacy, learning motivation and online communication self-efficacy which indirectly had a relationship with the character strength of students. own.

3. Effect of learning culture on learning satisfaction

Thefindings *results for inner weights* in table 2 above, show that the learning culture has a positive and significant effect on satisfaction with online learning for students at Putra Indonesia University YPTK Padang. Where the regression coefficient value is 0.571 with a t-statistic value of 8.251, if the t-statistic value is compared with t-table 1.96 on the error rejecting the 5% data where 8.251> 1.96. Therefore it can be concluded that learning culture has a strong relationship and determines the ups and downs of online learning satisfaction. This finding is also in line with the assessment of the respondent's achievement level (TCR), where the learning culture possessed by the University of Indonesia Putra YPTK Padang students seems to be good enough and able to determine the level of satisfaction in online learning. According to Throndike in Hamalik (2011), related to learning habits (learning culture) composing learning laws one of which is the law of influence (*the law effect*). In this law, relationships are strengthened or weakened depending on satisfaction or displeasure regarding their use.

4. The Effect of Character Strength on Learning Satisfaction

Based on the *results for inner weights* in table 2 above, it can be concluded that the strength of student character has a positive and significant influence on satisfaction with online learning for students at Putra Indonesia University YPTK Padang. Where the regression coefficient value is 0.176 with a t-statistic value of 2.055, if the t-statistic value is compared with t-table 1.96 on the error rejecting the 5% data where 2.085> 1.96. Thus it can be interpreted the strength of student character can be used as a factor that also determines satisfaction in online learning. The findings of the assessment of the respondent's achievement level (TCR), also showed that the character strength and learning satisfaction possessed by students were already in a fairly good category. In other words the strength of student character has a strong relationship and determines the satisfaction of online learning. The results of this hypothesis are supported by the theory put forward by Wibowo (2012), character is a person's personality that is formed from the results of internalizing various virtues that are believed and used as a basis for perspective, thinking, behaving, and behaving. Furthermore Kesuma (2011), character is a value about something that is manifested in the form of behavior.

5. Effect of learning satisfaction on readiness of online learning

Based on the *results for inner weights*, it shows that learning satisfaction has a positive and significant influence on online learning readiness in students of Putra Indonesia University YPTK Padang. Where the regression coefficient is 0.109 with a t-statistic value of 1.695, if the t-statistic value is compared with t-table 1.96 on the error rejecting 5% data where 1.695> 1.96. This finding can be interpreted that learning satisfaction possessed in students in online learning will have an impact on the readiness of online learning which is increasingly high. The results of the assessment of the respondent's achievement level (TCR) show that the level of learning satisfaction that exists has been seen to be able to improve online learning readiness better.

The connection and interaction between students (*peer-to-peer interaction*) is conducive in supporting the process of analytical critical thinking in the online learning process, and this condition by Kranzow (2013) will explain the effect on student satisfaction and impact on readiness for learning.

6. The effect of learning culture influences the readiness of online learning through learning satisfaction The statement of this hypothesis is an indirect influence, to determine the extent to which learning satisfaction is able to mediate and reinforce the influence of learning culture on readiness for online learning. The following path analisys below:

Figure 2. Conceptual Framework Hypothesis – 6

To calculate the indirect influence of the learning satisfaction variable, the *Sobel Test* is used which was developed by Sobel (1982), with the following formula:

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

Next to test the significance of indirect influence then calculate the value of t from the coefficient ab with the following formula:

$$t = \text{The} \quad \frac{ab}{S_{ab}}$$

following results of calculations using the Sobel Test (Sobel Test):

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

$$S_{ab} = \sqrt{(0.109)^2 X (0.069)^2 + (0.571)^2 x (0.064)^2 + ((0.069)^2 X (0.064)^2)}$$

$$S_{ab} = 0.009635544$$

To determine the significance of the indirect influence of the learning culture on online learning readiness through learning satisfaction, then the calculation of the t value is calculated using the following formula:

$$t = \frac{ab}{S_{ab}}$$

$$t = \frac{(0.571 \times 0.109)}{0.009635544}$$

$$t = 0.720$$

Results the calculation of the calculated t value finds a t value of 0.660, when compared with the t table value of 1.96 in the error rejecting the data of 5%. Then the value is lower than 1.96 or 0.660 <1.96. Thus it can be interpreted that the variable learning satisfaction cannot significantly mediate the effect of learning culture on online learning readiness on students of Putra Indonesia University YPTK Padang. In other words there is no significant effect of learning culture on online learning readiness through learning satisfaction that is owned by students of Putra Indonesia University YPTK Padang.

7. The influence of character strength influences the readiness of online learning through learning satisfaction.

Furthermore for the 7th hypothesis, the revelation of this hypothesis illustrates the indirect effect, to determine the extent to which learning satisfaction is able to mediate and reinforce the influence of character strength on readiness for online learning. The following is the path of the analysis below:

Figure 3. Conceptual Framework Hypothesis - 7

Next to assess the indirect influence given by the variable learning satisfaction in strengthening the influence of character strength on online learning readiness, the *Sobel Test* was developed by Sobel (1982), using the formula the following:

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

Next to test the significance of the indirect effect then calculate the value of t from the coefficient ab with the following formula:

$$t = \text{The } \frac{ab}{S_{ab}}$$

following results of calculations using the Sobel Test (Sobel Test):

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

$$S_{ab} = \sqrt{(0.109)^2 \times (0.085)^2 + (0.176)^2 \times (0.064)^2 + ((0.085)^2 \times (0.064)^2)}$$

$$S_{ab} = 0.012116477$$

To determine the significance of the indirect effect of character strength on online learning readiness through learning satisfaction, then the calculation of the value of t is calculated using the formula as follows:

$$t = \frac{ab}{S_{ab}}$$

$$t = \frac{(0.176 \times 0.109)}{0.012116477}$$

$$t = 1.583$$

The results of the calculation of the value of t arithmetic get a value of t of 1.583, when compared with the value of t table 1.96 in the case han rejected the data by 5%. This value is also relatively low from the value of t table or 1.583 <1.96. This finding can be concluded that in this case learning satisfaction also cannot significantly mediate the influence of character strength on online learning readiness on students of Putra Indonesia University YPTK Padang. Furthermore, it can also be explained that there is no significant influence of character strength on online learning readiness through learning satisfaction that is owned by students of Putra Indonesia University YPTK Padang.

4. CONCLUSION

The overall research findings found that the factors that influence online learning readiness which include learning culture, character strength and learning satisfaction are proven to be able to determine and influence the ups and downs of online learning readiness in YPTK Padang Putra Indonesia University students. Furthermore, this study also concluded that learning culture and strength of character can influence learning satisfaction in students of Putra Indonesia University YPTK Padang. Another finding from this study is related to the indirect influence of the mediating variable influence in this case is learning satisfaction in strengthening the influence of learning culture and character strength on online learning readiness, not found a significant effect on students of Putra Indonesia University YPTK Padang.

References

[1]. Allen, I. E., & Seaman, J. (2013). *Changing course: Ten years of tracking online education in the United States*. Sloan Consortium. PO Box 1238, Newburyport, MA 01950.

[2]. Arikunto, Suharsini. 2010.Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta: PT. Rineka Cipta

[3]. Bhuasiri, W. Xaymoungkhoun O. Zo H. Rho JJ. Ciganek AP (2012). Critical success factors for e-learning in developing countries: a comparative analysis between ICT experts and faculty. *Comp. Edu*, *58*, 843-855.

[4]. Bora, M. A. (2017). Analisa Kepuasan Penggunaan E-Learning Cloud Sekolah Tinggi Teknik (STT) Ibnu Sina Batam. *Jurnal Industri Kreatif (JIK)*, *1*(01), 55-62.

[5]. Borotis, S., & Poulymenakou, A. (2004). E-learning readiness components: Key issues to consider before adopting e-learning interventions. In *E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1622-1629). Association for the Advancement of Computing in Education (AACE).

[6]. Chang, I-Ying, Chang, Wan-Yu. 2012. "The Effect of Student Learning Motivation on Learning Satisfaction". *International Journal of Organizational Innovation*, 4(3), 281-305. Diunduh 23 Desember 2016 dari http://search.proquest.com/docview/921995037

[7]. Cigdam, H., & Yildirim, O. G. (2014). Effects of students' characteristics on online learning readiness: A vocational college example. *Turkish Online Journal of Distance Education*, *15*(3), 80-93.

[8]. Ghozali, I. 2008. Structural Equation Modeling: Alternative Method with Partial Least Square (Pls). *Semarang, Indonesia*

[9]. Hamalik, Oemar. 2013. Kurikulum dan Pembelajaran. Jakarta: Bumi Aksara

[10]. Hung, M. L., Chou, C., Chen, C. H., & Own, Z. Y. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*, *55*(3), 1080-1090.

[11]. Jogiyanto dan Abdillah, Willy. (2009). Konsep dan Aplikasi PLS Untuk Penelitian Empiris. Yogyakarta : Fakultas Ekonomika dan Bisnis UGM

[12]. Kaminski, K., Switzer, J., & Gloeckner, G. (2009). Workforce readiness: A study of university students' fluency with information technology. *Computers & Education*, *53*(2), 228-233.

[13]. Kaur, K., & Zoraini Wati, A. (2004). An assessment of e-learning readiness at Open University Malaysia. -, 1017-1022.

[14]. Kranzow, J. (2013). Faculty leadership in online education: Structuring courses to impact student satisfaction and persistence. *Journal of Online Learning and Teaching*, *9*(1), 131.

[15]. Litman-Ovadia, H., & Davidovitch, N. (2010). Effects of congruence and character-strength deployment on work adjustment and well-being. *International Journal of Business and Social Science*, *1*(3).

[16]. Londong, D. (2012). Kepuasan Pelanggan (Customer Satisfaction). *dedylondong. blogspot. com*.

[17]. McCullough, M. E., & Snyder, C. R. (2000). Classical sources of human strength: Revisiting an old home and building a new one. *Journal of Social and Clinical Psychology*, *19*(1), 1-10.

[18]. Mungania, P. (2003). The seven e-learning barriers facing employees. *The Masie Centre*.

[19]. Nistor, N., & Neubauer, K. (2010). From participation to dropout: Quantitative participation patterns in online university courses. *Computers & Education*, *55*(2), 663-672.

[20]. Park, J. H., & Choi, H. J. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Journal of Educational Technology & Society*, *12*(4), 207-217.

[21]. Park, N., Peterson, C., & Seligman, M. E. (2004). Strengths of character and well-being. *Journal of social and Clinical Psychology*, *23*(5), 603-619.

[22]. Peterson, C., & Seligman, M. E. (2004). *Character strengths and virtues: A handbook and classification* (Vol. 1). Oxford University Press.

[23]. Pillay, H., Irving, K., & Tones, M. (2007). Validation of the diagnostic tool for assessing tertiary students' readiness for online learning. *High Education Research & Development*, 26(2), 217-234.

[24]. Robbins, S. P., & Judge, T. A. (2007). Organizational culture. *Organizational behavior*, 28-50.

[25]. Slameto. 2010. Belajar dan Fakor-Faktor Yang Mempengaruhinya.Jakarta: Rineka Cipta

[26]. Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effect in structural equation models. In S. Leinhardt (Ed.), Sociological Methodology 1982 (pp. 290-312).Washington DC: *American Sociological Association*

[27]. Sutikno, E. (2011). *Hubungan fungsi keluarga dengan kualitas hidup lansia* (Doctoral dissertation, Universitas Sebelas Maret).

[28]. Tika, Moh. Pabundu 2006. *Budaya Organisasi dan Peningkatan Kinerja Perusahaan*. Penerbit: Bumi Aksara.

[29]. Wibowo, A. (2012). *Pendidikan karakter: Strategi membangun karakter bangsa berperadaban*. Pustaka Pelajar.

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