

Interaction E-Learning Website, Curriculum Material Products, Motivation And Digital Literacy influence to Satisfaction and The Attitude Understanding Student Learning

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Abstract: *E-learning becomes one alternative for limited of education infrastructure in Indonesia. So, technological innovation website as one alternative content educational uses in the world of education today. Effectiveness of system e-learning should have constructivism approach when they use this system. This research question was what kinds of variables could influence the attitudes of student understanding when he used this system. Survey conducted on 274 e-learning students from Online Binus University and Indonesia Open University (UT). The results of the primary data was processed by using Wrappls 3.0 to process the structure equation model of the frame research. Ten hypothesis were proposed but only some hypothesis were valid. Variables such as motivation, digital literacy and satisfaction would affect directly to the attitude of understanding student learning, while the curriculum material product and interaction e-learning website did not influence the understanding student e-learning attitude.*

Keyword: *interaction e-learning website, e-learning, curriculum material product, motivation, digital literacy, satisfaction, understanding student learning attitude*

I. Background

The attitude of the understanding student e-learning experience at the university get the most attention recently. Their understanding attitude as independent individual are very important in learning process for a better future. The attitude does not come automatically but it involves some factors that they will determine their independent attitude. The independent of the student in the learning process will be needed especially for distance learning process or e-learning. Which is student distance learning systems uses the website for interactive with peer, lecture, staff and material courses. The opportunity of this system is unlimited time and rich source of information. This system is appropriate for individuals who have already working but they want to continue their education. So, The Directorate General of Higher Education uses this learning system as alternative to improve the quality of workforce people (IEQ, 2013). Therefore, Indonesian government supports universities over information technology as part of their e-learning process (Kompas, 2008). In fact, the e-learning program becomes a model method of learning in the future (Yen & Lee, 2011).

The e-learning program is a method online delivery material courses, that uses website with less face to face (Poon, 2013). The website system should accommodate the needs and preferences of students (William et al., 2008). The e-learning website will encourage students to learn interactively and collaboratively (Graham, 2006). Furthermore, effectiveness of e-learning system as a succes model should be tested. The success of this system can be seen from the attitude of the student learning. Students will have a positive attitude in learning when he feels satisfaction after interact with the website. Positive attitude understanding student e-learning is influenced by motivation, interaction e-learning website, curriculum material products and digital literacy.

The perception student of satisfaction after using e-learning website influenced to the attitude understanding student learning process. This satisfaction is social factor of humanity (Collier & Bienstock, 2006), but Al Qeisi did not find satisfaction as an intervening influence on the attitudes understanding student learning process (Al - Qeisi , 2009). He found motivation as psychological factor relationship with the quality of the website (Venkatesh 2000; Al - Qeisi , 2009). While social factor of humanity is ability of digital literacy. Microsoft found the ability of digital literacy website users in Indonesia in the 21st century was very low. This result talked about the lowest of students ability of computers, digital tech - literacy skills, reading comprehension, critical thinking and problem solving, written communications, ethic and social responsibility, creativity and innovation, life - long learning and self - direction, media literacy, global awareness and science in Indonesia. Futher more, this fenomena becomes an interesting study according to implementation in e-larning program.

Previous researchs only focused on the system working of information technology in delivering services. The e-learning program needs more deeper than previous researchs. The study comprehensive

regarding implementation of e-learning program were the quality of interaction during the learning process using the website, the material curriculum product itself, student motivation in the learning process by using e-learning, knowledge of digital and satisfaction. The urgency of this research tried to find out the significant variables influencing the attitude understanding student learning.

II. Study literature

Constructive Theory

Learning is not just remember, but the man must really understand. Education is expected to be taught how to appreciate the diversity. Learning regularity pattern has become a routine learning situation that builds human mindset to be more creative (Degeng, 2005). Revolution in the history of educational constructivism theory stressed the concept of new information and encouraged effectively learning model for our daily living (Kim, 2005). This term refers to the process whereby each student involved in the learning process in groups, students motivate, students can think critically to build knowledge (Kim, 2005). The most important element in a constructivist is freedom and diversity. Individual freedom makes a choice while diversity is an individual awareness of groups differ with the individual.

Orientation of Satisfaction

Satisfaction is the feeling of pleasure or disappointment that comes after the consumer compares the expectations of the performance of a service or goods. It refers to "Satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product's perceived performance in relation to his or her expectations (Kotler & Keller, 2006). Complacency consumers identified in several types, no complaints, loyalty and word of mouth. No complaints from consumers shows that consumers satisfied. The service's website interacts with consumers well so customers find their satisfaction. Customers feel the quality of life increases. Therefore, the company should aware that the marketing orientation of today is not only transaction but also the relationship with the customer. Companies are realizing four key success of the consumer relationship. They are consumer value, consumer satisfaction, consumer trust and consumer retention.

E-learning

The development of information and communication technology is rapidly increasing, consumers need a learning system based on innovation diffusion. The concept of e-learning system brings the transformation of conventional education to a digital system. The concept of e-learning system has been widely accepted by the world community began in the 1970s in the world. The concept of e-learning system considered as the evolution of delivery curriculum content from face to face in class into distance learning, in which the instructor and student are separated by distance and time. Although the definition of e-learning system was vary widely, broadly but it referred to a web-based learning. Utilizing web communication, collaboration, multimedia, knowledge transfer and training to supported student learning active learners without being limited by space and time.

Interaction and Product Quality E-learning

Interaction is communication relationship between two parties (Morgan & Hunt, 1994). Interaction using the innovation website information system will be effectively widespread global communication network. Parasuraman and Zeithaml (2005) measure of service quality in 10 dimensions: tangible (intangible), reliability, responsiveness, competence (knowledge and skills), courtesy (behavior), credibility, security, easy to access, communication and understanding the customer.

Motivation

An expert on motivation is Maslow (Maslow, 1968). The assumption of his theory based on the power of his self development. Every each person has to take a chance. He has move to forward, unique, abilities and self-confidence towards the globalizaion. This Maslow' theory refers to individual five levels of his needs.

Digital literacy

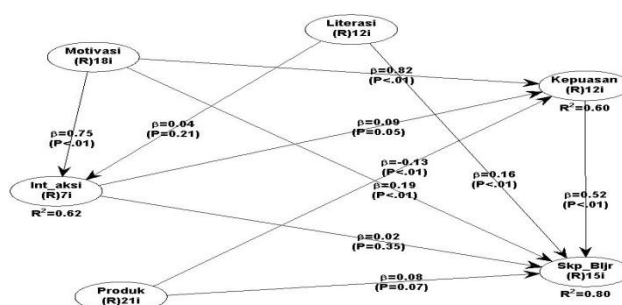
The concept of literacy from The International Literacy Institute, the information technology innovation has the sense of a new skill of read, write, communicate and think critically (Eisenberg, 2004). Furthermore, the human information literacy ability must equip himself with another literacy. The concept of digital literacy related to the Internet interconnection of computer networks around the world. This network of exchange of information (Turban, 2003; Mcleod, 2012).

III. Research Design

The types of data collected in this study are qualitative data using questionary survey. Operationalization of constructs were exogenous latent variables. Those were the curriculum material products,

motivation, digital literacy, interaction e-learning website. The mediating variable was satisfaction and the endogenous variable were the attitude understanding student learning. The Partial Least Square used to predict all variables because PLS was not only used to confirm the theory but also it could be used to explain the presence or absence relationship between latent variables (Fornell & Bookstein, 1982; Hair, 2010). This study conducted at the undergraduate in every level from a variety of majors. When the study was conducted from February 2013 - May 2013. The samples were taken at 435 respondents.

Figure 4.1 . Framwork and Result



Note :Motivasi = motivation ; Int_aksi = interaction with website; Produk = Product curriculum; literasi = digital Literacy; kepuasan = satisfaction; Skp_Bhv = The attitude understanding student learning

Based on the framework and previous research questions the researchers gave ten research hypotheses :

- H1 = The interaction e-learning website influenced a positive to the attitude understanding student learning (had not proven)
- H2 = The curriculum material products influenced a positive to the attitude understanding student learning (had no proven)
- H3 = The motivation influenced a positive to the attitude understanding students learning (had proven)
- H4 = The digital literacy influenced to the attitude understanding student learning (had proven)
- H5 = The satisfaction became mediating variable between the interaction e-learning website to the attitude understanding of student learning (Had proven)
- H6 = The satisfaction became mediating variable between the curriculum material products to the attitude understanding student learning (had proven)
- H7 = The satisfaction became mediating variable between the motivation to the attitude understanding learning (had proven)
- H8 = The interaction e-learning website became mediating variable between the motivation to the attitude understanding learning student (had not proven)
- H9 = The interaction e-learning website became mediating variable between the digital literacy to the attitude understanding learning student (had not proven)

Four hypotheses had not proved significant but five hypotheses had proved. This result hypothesized that attitude understanding learning student was not influenced directly by the curriculum material products delivered through the website and the interaction e-learning website. The motivation, the digital literacy and the satisfaction consumers influenced directly to the attitude understanding learning student. On the other hand, the motivation influenced the interaction e-learning website and the attitude understanding learning student. The curriculum material products influenced the satisfaction consumer.

Students found lack of interacted with their tutors and admin campus, that way this variables did not influenced to the attitude understanding learning student. The quality of interaction should be good establish if communication effectively between them.

Students did not satisfy with teaching materials delivered through the website and they did not have good quality communication between students and the university staff or tutor. On the other hand, the strong motivation students make hem tried to be positive, while they had interacted with fellow students. The determinant of satisfaction ($R^2 = 0.60$) influenced by exogenous variables..

The determinant of the attitude understanding student learning ($R^2 = 0.80$) was influenced student's motivation, ability of digital literacy and their satisfafaction. These variables were parts of social factor of student. According to this result was the students accepted the website as part of campus services.

Indicators the attitude understanding student learning has made up by freedom, newness and repeated behavior. Indicators the interaction e-learning website has made up by clearly content of teaching material, easy to use, graphics and videos, security, adapting to other formats and the quality of the responsiveness. Indicators the variable satisfaction has made up by feeling, perceived benefits in line with expectations, and the moral potential profits as confident. Indicators the motivation has make up by control of the self- regulation, the spirit of life from his habit, facing new things, referring to the spirit and controlling by the environment, capability themselves, avoiding a penalty award, referring to fellow human interrelationships. Indicators the variable digital has made up by ability of using technology, accessing information through the internet, using other resources, knowing the function of source trough website, learning synthetically by the website, and interacting online with others.

The internet technology makes students, campus staff and faculty as well as a tutor easy communication. The important thing, the time of the data transmission process passed through the internet technology can run quickly. It should go well but in the reality in Indonesia, it still has not happened as the ideal. Campus management should be focus on the resources effectively and efficiently in the process of teaching and outcomes expected. The management of the college faced a complexity managing all process. Complexity started from new admissions until the graduation process services.

Eventhought, there was chaos in the final output if a component of the education process was altered, but the changing from the conventional education system into the online submission for a better purpose is improving until now. This condition will be good when monitoring and evaluating of mechanisms to stages of process have to manage. Good supervision deviation of the results can be directly addressed, so it does not result in deviations from the evaluation of the process next year .

IV. Conclusions

This study models the attitude understanding student learning in college online. The research question focuses on two main questions. First , how did the attitude understanding student learning by use this system. Second, how did the consumer satisfaction as the key to the success of a business education explaine from this model and its related to the attitude understanding student learning .

Based on the first research question, the statistical results showed that 80 % of respondents had a positive attitude understanding student learning. Based on these result states that the attitude of understanding student learning attitude was influenced by motivation, digital literacy and satisfaction.

Based on the second research question, the statistical results showed that 60 % of respondents had a positive feeling satisfied during e-learning program. Based on these result states that the variables that will affect the satisfaction of learning is teaching products delivered via the website, and the students satisfaction was influenced by curriculum material products, motivation and interaction e-learning website.

Therefore, the university should be focus on these factors which factors have potential factors to make satisfied students and the attitude understanding student learning. This will support the success of students to complete the learning process on time .

Implication

Students were satisfied when the website innovation fun, encouraging and improving. So, we suggest: First, the college should be up grade website according to student'needs, convenience and dynamic display. College needs to have specific department to handle it properly and efficiently. This will be an obstacle for institutions that do not have skilled experts in the field of informatics as it requires research and testing is time consuming and costs.

Second, customer satisfaction should be the orientation of the campus where motivate students, faculty and staff with a variety of ways to be emphasized as important as the provision of services the website as part of the campus. It is important that the results of innovation can be used optimally by the users.

Refference

- [1]. Al-Qeisi K.I (2009). Analyzing the Use of UTAUT Model in Explaining an Online Behaviour: Internet Banking
- [2]. Adoption, A thesis submitted for the degree of Doctor of Philosophy, Department of Marketing and Branding, Brunel University, March
- [3]. Collier J. E. and Bienstock C.C. (2006), Measuring Service Quality in E-Retailing.
- [4]. Journal of Service Research, 8; 260.
- [5]. Eisenberg, Michael (2008). "Information Literacy: Essential Skills for the Information Age". DESIDOC Journal of Library & Information Technology , March, 28 (2): 39–47.
- [6]. Fornell, C., & Bookstein, F. (1982). Acomparative analysis of two structural equation models: LISREL and PLS
- [7]. applied to market data. Dalam In C. Fornell (Ed.), A second generation of multivariate analysis (hal. 289-394). New York: Praeger
- [8]. Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk
- [9]. & C. R. Graham (Eds.), Handbook of blended learning: Global perspectives, local designs (pp. 3-21). San Francisco, CA: Pfeiffer
- [10]. Hair, Joseph F. et al, (2010). Multivariate Data Analysis a Global Perspective, Pearson Prentice Hall.

- [11]. Kim (2005), "The Effects on Constructivist Teaching Approach on Student Academic Achievement, Self-Concept, and Learning Strategies", *Asia Pacific Education Review* 6 (1): 7-19. Doi: 10.1007/bf03024963.
- [12]. Kompas.com (2008). Plastik Tips untuk Baca eBook, Jumat, 12 September, <http://nasional.kompas.com/read/2008/09/12/11511970>.
- [13]. Kotler P. and Keller K.L (2006). *Marketing Management*, Twelve edition, Pearson edition International, Singapore
- [14]. Maslow, A. H. (1968). *Toward a Psychology of Being*. New York: D. Van Nostrand Company.
- [15]. McLeod, J. (2012) What do clients want from therapy? A practice-friendly review of research into client preferences. *European Journal of Psychotherapy, Counselling and Health*, 14, 19-32
- [16]. Morgan, R. M., and Hunt, S. D. (1994) The Commitment-Trust Theory of Relationship Marketing, *Journal of Marketing*, Vol. 58, July, pp.20-38.
- [17]. Parasuraman, A., Valarie A. Zeithaml, and Arvind Malhotra. (2005) "E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality," *Journal of Service Research*, 7 (3), 213-33.
- [18]. Poon, J. (2013). Blended Learning: An Institutional Approach for Enhancing Students' Learning Experiences .
- [19]. MERLOT *Journal of Online Learning and Teaching*, Vol. 9, No. 2, June.
- [20]. Seamolec. (2008). *The Utilization of Information and Tecnology by Student in Universitas Terbuka*. Jakarta, Indonesia: Seamolec.
- [21]. Turban, D.B. & Cable, D.M. (2003). [Firm reputation and applicant pool characteristics](#). *Journal of Organizational Behavior*, 24, 733-751.
- [22]. Venkatesh, V. (2000) Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model. *Information System Research*, 11 (4) 342-365.
- [23]. Williams, N. A., Bland, W., & Christie, G. (2008). Improving student achievement and satisfaction by adopting a blended learning approach to inorganic chemistry. *Chemistry Education Research and Practice*, 9(1), 43-50. doi:10.1039/B801290N
- [24]. Yen, J.-C., & Lee, C.-Y. (2011). Exploring problem solving patterns and their impact on learning achievement in a blended learning environment. *Computers & Education*, 56(1), 138-145. doi:10.1016/j.compedu.2010.08.012