The Effect of E-Learning Resources on Image and Implications on Trust
(Study at Open University in Indonesia)

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ARTICLE INFORMATION

This study aims to examine the effect of e-learning resources on images, the influence of e-learning resources trusts, the influence of images on trusts, and the influence of e-learning resources trusts through images. This research uses quantitative research methods. Time horizon is cross sectional, because it is done at a certain time. The unit of analysis is the Open University with the observation unit being students from the Open University, with a sample of 300. The analytical design used to test hypotheses and determine the relationship between research variables is Structural Equation Modeling (SEM). The results showed that E-learning resources also affect the image of the trust. Image affects trust. The development of trust in E-learning is more dominantly built by images, and images are built by e-learning resources. The results of this study have implications for university management in the development of e-learning that increasing trust needs to be built by efforts to improve image. To develop an image, it is necessary to build adequate e-learning resources that are built with the development of tangible assets and intangible assets.

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INTRODUCTION

E-learning is learning activity that is organized with the aim of using an electronic system or also a computer so that it is able to support a learning process (Allen, 2016). E-Learning infrastructure can be in the form of personal computers (PCs), computer networks, internet and multimedia equipment. This includes teleconference equipment if we provide synchronous learning services through teleconference (Wahono, 2008).

Failure to implement e-Learning is mostly not due to problems with tools, software or infrastructure, the severity of work culture changes and the lack of willingness for knowledge sharing. A 2000 study conducted by the Forrester Group of 40 large companies showed that the majority of workers (more than 68%) refused to attend training using the concept of e-Learning. When e-Learning was required 30% of them refused to participate]. While other studies indicate that of those who register to participate in e-Learning, 50-80% never complete it until the end (Wahono, 2008). Therefore we need adequate e-learning resources for educational institutions to attract participants to be able to participate in learning and provide quality teaching quality. Quality e-learning resources will attract participants so that they are expected to be able to improve the image of educational institutions and increase the trust of participants and the general public.

Based on this background, this study aims to examine: the effect of e-learning resources on images, the influence of e-learning resources trusts, the influence of images on trusts, and the influence of e-learning resources trusts through images.

LITERATURE REVIEW

An organization is a unique collection of resources and capabilities. Resources, capabilities and core competencies are the basis of competitive advantage. Resources consist of tangible and intangible resources (Volberda et al., 2011). Company resources and capabilities represent competitive assets and determine their competitiveness and ability to succeed in their markets. Resources are divided into two main categories, namely: tangible resources and intangible resources (Thompson et al., 2013). Each company is fundamentally different because it has a unique set of resources consisting of tangible assets, intangible assets, and organizational capabilities to utilize these assets (Pearce & Robinson, 2013). Based on this concept, the E-learning variable in this study is measured by two dimensions, namely tangible assets and intangible assets.

Image is people's perception of the company or its products (Kotler & Keller, 2015). Organizational image is a perception of an organization that existed in the minds of people (Zeithaml, 2010). Image has several elements, which include symbols, physical space, events and media (Kotler & Keller, 2015). In this study, image variables are measured by dimensions: skill, Physical Space, event, and media.

It is important to build customer trust and confidence so that customers will voluntarily be loyal to the company (Kotler & Keller, 2015). that trust is an important factor for an organization in achieving success. At the same time, it becomes a supporting factor in achieving good relations between the company and customers. Trust in the study was measured using the dimensions of organization, employee and goods and services (Chamchuntra & Fongsuwan, 2014). The dimension of customer trust consists of consumer's subjective belief, collective subjective confidence, customer subjective beliefs (Ba & Pavlou, 2002), (Kim & Benbasat, 2009). In this study, trust is assessed from two dimensions, namely quality and reputation.

Previous research has found that developing superior internal capabilities and adjusting strategies influence reputation (Mukherji, 2011). In addition, customer trust is influenced by price, service, and brand image (Raza & Rehman, 2009). Based on this, the following hypotheses are arranged:

H1: E-learning resources affect the image
H2: E-learning resources influence trust
H3: Image influences trust
H4: E-learning resources influence trust through images

METHOD

This study uses applied research methods based on quantitative data types. The time horizon is cross sectional, because this research was conducted at a certain time. The unit of analysis is the Open University with a student observation unit from the Open University. Samples will be taken as...
many as 300. The design of the analysis used to test hypotheses and determine the relationship between research variables is Structural Equation Modeling (SEM).

RESULT AND DISCUSSION
Evaluation of Model (Goodness of Fit)
The measurement model contains the relationships between the latents variables and measured variables (indicators), and the structural model that contains the relationships between the latent variables. Before testing the structural model we must test the measurement model to ensure that the model fits the sample data.

Table 1. Goodness of Fit

| No. | Source Degree of Match | Value | Acceptable Level | Annotation |
|-----|------------------------|-------|------------------|------------|
| 1   | Chi Square             | 103.52| P-value >0.05    | Close Fit  |
|     | Normed Chi Square (x²/df) | P-value = 0.60389 |             |            |
| 2   | Goodness of Fit Index (GFI) | 0.96 | >0.8             | Close fit  |
| 3   | Root Mean Square Error of Approximation (RMSEA) | 0.000 | RMSEA≤0.06 (good fit) | Close fit |

Chi-Square value of with the Degrees of Freedom 108 is 103.52 with the p value of Chi-Square 0.60389> 0.05, this model is fit (Hair et al., 2010). RMSEA value of this research model is 0.000 < 0.05, which shows that the overall fit of the model is quite good and Goodness of Fit Indices (GFI) > 0.80, so it can be concluded the research model is appropriate with empirical conditions.

Analysis of Measurement Model
Analysis of measurement model shows the relationship between manifest with each latent variable. Validity and reliability test (table 2) is used to measure the latent variables and the indicators in measuring the dimension that is constructed. Cronbachs Alpha's value is used to measure the reliability of dimension in measuring variables. The value of Cronbachs Alpha bigger than 0.70, indicates that the dimensions and indicators is reliable in measuring variables.

Table 2. Loading Factor of Latent Variable Dimension Indicator

| Variable | Dimension | Indicator | λ | SE(1) | t-value | Cronbachs Alpha |
|----------|-----------|-----------|---|-------|---------|-----------------|
| Elearning Resources | Tangible Asset | ELearn1 | 0.99 | 0.1 | 9.4 | 0.730 |
|          |           | ELearn2 | 0.71 | 0.073 | 9.66 |         |
|          | Intangible Asset | ELearn3 | 0.98 | 0.11 | 8.99 |         |
|          |           | ELearn4 | 0.67 | -    | -     |         |
| Image    | Skill     | Image1 | 0.75 | -    | -     |         |
|          |           | Image2 | 0.76 | 0.063 | 12.04 |         |
|          | Physical Space | Image3 | 0.91 | 0.07 | 13.01 |         |
|          |           | Image4 | 0.79 | -    | -     |         |
|          | Event     | Image5 | 0.75 | -    | -     |         |
|          |           | Image6 | 0.77 | 0.067 | 11.48 |         |
|          | Media     | Image7 | 0.73 | -    | -     |         |
|          |           | Image8 | 0.75 | 0.067 | 11.07 |         |
| Trust    | Quality   | Trust1 | 0.72 | -    | -     |         |
|          |           | Trust2 | 0.68 | 0.067 | 10.12 |         |
|          | Reputation | Trust3 | 0.74 | -    | -     |         |
|          |           | Trust4 | 0.74 | 0.064 | 11.57 |         |
|          |           | Trust5 | 0.76 | 0.064 | 11.81 |         |

The result of measurement model of dimensions by its indicators show that the indicators are valid which t-value >1.98 (t table at α = 0.05). The result of measurement model of latent variables on their dimensions shows to what extent the validity of dimensions in measuring latent variables.
Figure 1. Complete Path Diagram of Research Model

Figure 2. Complete t value of Research Model
Analysis of structural model
Based on the research framework, then obtained a structural model:

\[ Y = 0.41X_1 + \zeta_1 \quad R^2 = 0.168 \]
\[ Z = 0.15X_1 + 0.48Y + \zeta_2 \quad R^2 = 0.31 \]

X1 = E-Learning Resources
Y = Image
Z = Trust
\( \zeta_1 \) = Residual

Hypothesis Testing
Below is the result of hypothesis testing.

### Table 3. Testing of Hypothesis

| No | Hypothesis | Y | t-value | R² | Conclusion |
|----|------------|---|---------|----|------------|
| 1  | E-Learning Resources n-> Image | 0.41 | 5.51 | 0.168 | Hypothesis Accepted |
| 2  | E-Learning Resources n-> Trust | 0.15 | 2.04 | 0.023 | Hypothesis Accepted |
| 3  | Image-> Trust | 0.48 | 5.95 | 0.23 | Hypothesis Accepted |
| 4  | E-Learning Resources n-> Image-> Trust | 0.197 | 4.071 | 0.197 | Hypothesis Accepted |

* * significant at α=0.05 (t table = 1.96)

a) Learning Resources have direct effect significantly to Image \( (R^2=0.168) \) and Trust \( (R^2=0.023) \).
b) Image have direct effect significantly to Trust \( (R^2=0.23) \).
c) E-Learning Resources have indirect effect significantly to Trust with mediation by image and \( R^2 = 0.197 \).

Based on the results of hypothesis testing, can be described a research finding as follow:

The results of testing the hypothesis indicate that E-learning resources have a positive effect on the image of 16.8%. Meanwhile, E-learning resources also affect trust, but only by 2.3%. Image affects trust by 23%. The development of trust in E-learning is more dominantly built by images, and images are built by e-learning resources.

**CONCLUSION**

This study aims to examine the effect of e-learning resources on images, the influence of e-learning resources trusts, the influence of images on trusts, and the influence of e-learning resources trusts through images. The results showed support for the proposed hypothesis. E-learning resources affect the image as well as the trust. Image affects trust. The development of trust in E-learning is more dominantly built by images, and images are built by e-learning resources. The results of this study have implications for university management in the development of e-learning that increasing trust needs to be built by efforts to improve image. To develop an image, it is necessary to build adequate e-learning resources that are built with the development of tangible assets and intangible assets.

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