

CHAPTER I

INTRODUCTION

1.1. Research Background

In today's digital era, advances in information technology (IT) and the widespread use of IT in various fields have led to an increase in the development of information systems (IS) (Sharma et al., 2017). Information technology has been adopted by both organizations and corporations as a means of facilitating processes and making adjustments. These advancements inspire people to adapt to ever-more modern and sophisticated technologies.

In the field of education, information technology is useful for managing learning effectively. One of them is the development of an e-learning system to support academic activities. According to Pantazis (2001) in (Raspopovic et al., 2018) E-learning system is instructional content or learning experiences delivered through electronic technology, placed between information and communication technology (ICT) and education. E-learning system is the recent trend to improve academic and professional skills through the internet. E-learning system in the field of information technology has a significant impact on the quality of learning outcomes in educational institutions (Pratama & Scarlatos, 2020). E-learning system provides convenience regarding subject matter and material distribution, and it is not constrained by space or time constraints (Uppal et al., 2018).

E-learning has developed since 1990 in the form of CBT (Computer Based Training) and developed very rapidly in 2000 (Agustina, 2016). From an

economic perspective, North America has become the first e-learning market, with 85% of the total deal value, followed by Europe, which holds 10.2% of the total deal value (Calvo & Villarreal, 2018). In the Figure 1.1 the growth rate of the global e-learning market per year over the period 2017-2022 is depicted. In the picture the annual growth rate of e-learning is 13%. Based on the data in Figure 1.1 and refer to *Globenewswire*, the E-learning market is expected to reach \$457.8 Billion by 2026. This indicates that e-learning market is very promising.



Figure 1.1 Global Corporate E – Learning Market Size

Source : menafn.com

The development of e-learning system in Indonesia has existed since the mid-90s, but was only used in the early 2000s. The results of the study Putri (2017) stated that as many as 80% of high school in Indonesia were ready and 20% were

very ready to implement online-based learning. The Indonesian Minister of Research, Technology, and Higher Education stipulates regulations on distance education or higher education e-learning at the end of 2018. The information in Figure 1.2 presents a very significant and promising growth opportunity for online education in Indonesia. In 2017 Indonesia has e-learning market of \$12.2 Billion. Meanwhile, the Indonesian education system is ranked 54 out of 78 countries that are included in the world education ranking from the 2021 World Population Review. Based on this data, it can be concluded that education system in Indonesia is still low. This is based on several criteria, one of which is the lack of quality of educational facilities such as E-Learning. Thus, e-learning in Indonesia required to develop better quality to increase effectiveness. E - Learning effectiveness means that students can complete the online program they receive which represents the quality of an institution's educational system (Swan, 2003).



Figure 1.2 The State Of The Development Of E-Learning In Indonesia

Source : jawapos.com

E-learning effectiveness can be interpreted as the extent to which learning outcomes are achieved (Panigrahi & Ranjan Srivastava, 2018). Yengin (2011) explained that e-learning effectiveness is the level of student satisfaction with online learning and the benefits after completing learning with e-learning. In the Information System (IS) success model of the DeLone & McLean (2003), information quality, system quality, and service quality are very useful for evaluating the effectiveness of various e-business, e-government, and e-banking, and are now receiving attention in e-learning. Therefore, the author created a framework for the influence of information quality, system quality, and service quality on user satisfaction and net benefits in E-learning Myklass Faculty of Economics and Business, Universitas Muhammadiyah Yogyakarta.

Universitas Muhammadiyah Yogyakarta (UMY) is one of the educational institutions that has used an e-learning system called MyKlass. UMY uses the e-learning system as supporting technology and academic support media. MyKlass e-learning system provides facilities for sharing learning material content online, assigning assignments, collecting assignments, online exams, online discussions, and the ability to securely track student progress for educators.

The activeness of students in using e-learning makes the Webometrics ranking of the Universitas Muhammadiyah Yogyakarta (UMY) increase. Based on information obtained on the UMY website, Universitas Muhammadiyah Yogyakarta (UMY) has succeeded in getting into the top 10 best universities in Indonesia in the Webometrics 2021 version. Previously, UMY entered the 15th best

university in Indonesia and currently UMY has moved up 5 ranks to become 10th. the best university in Indonesia according to Webometrics 2021. This shows UMY's awareness in creating a quality e-learning system.

According to the Higher Education Database (PDDikti), the Faculty of Economics and Business (FEB) at UMY had the most students in 2021 of any faculty. They consequently used MyKlass more often than students from any other faculty at UMY. Based on this information, the author will discuss about The Effect of E-Learning System Quality on E-Learning System Effectiveness Study on Myklass as the E-Learning System of Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta.

This research is a modification of the research (Chopra et al., 2019) entitled *Effectiveness Of E-Learning Portals From A Student's Perspective A Structural Equation Model (SEM) Approach*. In this study, information quality, system quality and service quality have a contribution to the net benefits and user satisfaction. An e-learning system's effectiveness cannot be achieved without a high level of system quality that raises students' awareness and knowledge in order to attract them to educational courses. This study will prove that the quality of the e-learning system will affect the net benefits and user satisfaction based on the student perception. In this study, students registered on the MyKlass for the e-learning system at the Universitas Muhammadiyah Yogyakarta from Faculty of Economic and Business were considered as respondents.

1.2. Research Problems Formulation

This study will examine the relationship between the variables of information quality, system quality and service quality on user satisfaction and net benefits, thus obtaining the following research questions:

1. Does information quality have a positive and significant effect on user satisfaction?
2. Does information quality have a positive and significant effect on net benefits?
3. Does system quality have a positive and significant effect on user satisfaction?
4. Does system quality have a positive and significant effect on net benefits?
5. Does service quality have a positive and significant effect on user satisfaction?
6. Does service quality have a positive and significant effect on net benefits?

In addition to testing quantitative research, this study will explore several issues with a qualitative approach. The following research questions were used:

1. What are the problems faced by users when using the E-Learning system of Universitas Muhammadiyah Yogyakarta?
2. What are the problems faced by the technical staff in the implementation of the E-Learning system of the Universitas Muhammadiyah Yogyakarta?
3. What are the solution given by the technical staff to address user problems in using E-Learning system at Universitas Muhammadiyah Yogyakarta?
4. What are the solutions to the problems faced by technical staff in implementing the E-Learning system at Universitas Muhammadiyah Yogyakarta?

1.3. Research Objectives

Based on questions regarding the relationship of the proposed variables, this study has the following objectives:

1. To analyze the effect of information quality on user satisfaction
2. To analyze the effect of information quality on net benefits
3. To analyze the effect of system quality on user satisfaction
4. To analyze the effect of system quality on net benefits
5. To analyze the effect of service quality on user satisfaction
6. To analyze the effect of service quality on net benefits

Based on questions related to qualitative, the objectives of this study are:

1. To identify the problems faced by users when using the E-Learning system of Universitas Muhammadiyah Yogyakarta
2. To identify the problems faced by technical staff when implementing the E-Learning system of the University of Muhammadiyah Yogyakarta
3. To identify the solutions provided for users to overcome the problems in using the E-Learning system of the University of Muhammadiyah Yogyakarta
4. To identify the solutions used by technical staff to overcome the problems in implementing the E-Learning system of the University of Muhammadiyah Yogyakarta

1.4. Research Benefits

Below are the benefits that are expected to be obtained from this research:

1.4.1. Academic Benefits

1. This research is useful for providing knowledge related to e-learning system
2. This research is useful for further research and can be used as a reference for research in the field of e-learning systems

1.4.2. Practical Benefits

1. This research is used as an evaluation material for educational institutions that implement an e-learning system to provide information to improve a better e-learning system
2. This research is used as consideration for decision making, especially in system development on e-learning system.