# Chapter 32 Technology Adoption in Online Tutorial

**Djoko Rahardjo** Universitas Terbuka, Indonesia

Arifah Bintarti Universitas Terbuka, Indonesia

# ABSTRACT

Technology enabled academic delivery in most of the developing countries is plagued with the problems of poor utilization of such apparently so promising mediums. The students' attitudes towards the utilization of such technologies have not been sufficiently investigated in research literature. Focusing on the students experience in adopting technology especially in online tutorial, an online survey was carried out on a sample of 96 respondents analyzing with Structural Equation Model. The result showed that usefulness and ease of use positively correlated to the attitude of students in using the online tutorial. The study of these students' attitudinal behaviors gives rise to a new perspective in the design of ODL systems. The author argues that use of technology to explore customized solutions for the socioeconomically disadvantaged communities need to be a carefully planned process in which prospective target communities should participate as a co-designer.

## INTRODUCTION

## Background

The success of Open and Distance Learning (ODL) systems in any society will ultimately depend upon how best they can put in place Innovative and Flexible systems of Information dissemination, Programme Offerings, Student Support and Quality Assurance (Belawati T & Zuhairi A, 2007). Web based technologies open up a range of possibilities to develop such solutions. However technology per se is not the ultimate solution to accomplish the objectives. It's a challenge to assess how the prospective clientele will ultimately perceive the technology enabled solutions and utilize such solutions for their course completion. Challenges are uniformly the same across the developing countries; however it is

DOI: 10.4018/978-1-5225-5201-7.ch032

even more difficult in a country like Indonesia where prospective clientele of ODL systems comes largely from rural backgrounds, lives in sparsely distributed rural interiors and are not much familiar with the culture of technology. It makes the job of distance educators much more challenging in such a situation.

The Open University of Indonesia is still struggling to properly assimilate the technological solutions in their academic delivery strategies. Though the technological solutions are gradually becoming part of the programme offerings in Indonesia and many institutions have begun to experiment with modern ICT-based courses we find that access and participation by students is still relatively low (Belawati T & Zuhairi A, 2007). It is the challenge for Open University in Indonesia to socialize and educate students, educators and the society in using ICT facilities for ODL enterprise (Belawati T & Zuhairi A, 2007).

## Integrating Technology in Student Support

The use of information and communication technology (ICT) for teaching learning practices in distance education has experienced rapid growth across the world and is gaining popularity gradually. However its usage is primarily confined to those pockets where technology has become part of people's life. In those areas where the technology has not yet penetrated, the people's response to any technological intervention is not very spontaneous.

Majority of the clientele of Universitas Terbuka (UT) lives in such resource starved areas. Therefore the internet usage for students' support particularly in distance education is still in infancy in Indonesia. However, Universitas Terbuka (UT) is one of those few educational institutions in Indonesia which are gradually trying to utilize web based services to enhance the reach of their students support services. University provides online services to support students' learning which includes online counselling, online tutorials and, more recently, an online examination system. According to Zuhairi *et al.* (2007) the provision of learning support systems is crucial in making students successful in distance learning. Rahardjo *et.al* (2016) found that low level of access to computers was the major factor for the lack of internet usage. Other result showed that three dimensions of attitude (knowledge, willingness, and ability) in searching the internet had a correlation with the student using internet. This became one of factors that can determine the utilization of internet and course completion. It shows that the issue of technology adoption is an importance role in developing country like Indonesia. This finding was the same as Susilo (2015) had found that the technology competence had to be significant predictors of Behavior Intention.

Online tutorial in UT had been established for about last fifteen years. Online tutorial was an alternative learning service for students which could not be reached by other learning services. In this point, it seems that the students who could not find any resource at their areas, the resources for their learning can be provided by and in the internet. Actually the condition of UT's students who live in archipelago was suitable using online technology in their learning process, but internet facilities especially in a remote area was still rare.

The Indonesia Internet Service Provider Association (APJII) has report that there are 71.19 million internet user in Indonesia by the end of 2013. Based on survey result, APJII estimates that it is hard for Indonesia to achieve an alignment with the target of Millennium Development Growth (MDGs) which has also been agreed by the International Telecom Union (ITU), that in 2015 half population on earth must connected to the internet (Marius P & Pinontoan F, 2013).

Based on population in Java region, the highest number of internet users is West Java province with 13.2 million users, followed by East Java with 9.8 million users, and Central Java with 8.6 million users. While in other regions, based on population, the lowest internet users are found in West Papua and

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/technology-adoption-in-online-tutorial/196701

# **Related Content**

#### A System for the Semi-Automatic Evaluation of Clinical Practice Guideline Indicators

Alexandra Pomares Quimbaya, María Patricia Amórtegui, Rafael A. González, Oscar Muñoz, Wilson Ricardo Bohórquez, Olga Milena Garcíaand Melany Montagut Ascanio (2016). *Human-Computer Interaction: Concepts, Methodologies, Tools, and Applications (pp. 1176-1186).* www.irma-international.org/chapter/a-system-for-the-semi-automatic-evaluation-of-clinical-practice-guideline-indicators/139086

#### Technology Acceptance Theories: Review and Classification

Alaa M. Momani, Mamoun M. Jamousand Shadi M S Hilles (2018). *Technology Adoption and Social Issues: Concepts, Methodologies, Tools, and Applications (pp. 1-16).* www.irma-international.org/chapter/technology-acceptance-theories/196668

#### Strategies to Support the Faculty Adoption of Technology for Student Success Initiatives

Phyllis K. Brooks Collins (2018). Technology Adoption and Social Issues: Concepts, Methodologies, Tools, and Applications (pp. 1034-1041).

www.irma-international.org/chapter/strategies-to-support-the-faculty-adoption-of-technology-for-student-successinitiatives/196716

### Technology and Uneasiness in the Globalized Planet: Wasted Widespread Power in Digital Screens

(2024). Considerations on Cyber Behavior and Mass Technology in Modern Society (pp. 1-24). www.irma-international.org/chapter/technology-and-uneasiness-in-the-globalized-planet/338248

#### Exploring the Impact of Digital Detoxification on Higher Education Students' Learning

Anshul Garg, Amrik Singhand Jia Yanan (2024). *Business Drivers in Promoting Digital Detoxification (pp. 111-126).* 

www.irma-international.org/chapter/exploring-the-impact-of-digital-detoxification-on-higher-education-studentslearning/336745