

## Adoption of Educational Social Network Sites in Teaching and Learning: A Task-Technology Fit Perspective

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### Abstract

Different classes of people, especially students benefit from the advantages of Social Network Sites (SNS). Although commercial types of SNS, including Facebook and LinkedIn, are commonly used by the students, there are few studies on the educational SNS, including Edmodo. A research model has been provided in the present study based on the Task Technology Fit (TTF) theory in order to examine the factors which are mainly unexplored and may affect the utilization of educational SNS in the process of teaching and learning. Distribution of the questionnaires was carried out among 317 students of the technological university in Malaysia, according to purposive sampling. Data analysis was performed by SmartPLS2.0, the results of which indicated considerable impacts of Communication, Mobility, Trust, and Privacy as the features of technology on TTF. Accordingly, negative effects of task non-routineness and the positive effects of task interdependence on TTF were reported. At the same time, direct examination of adopting SNS in the process of teaching and learning was done using the fit between task and technology features.

Keywords: Social Network Sites, Teaching and Learning, Adoption, Task-Technology Fit Theory, Trust, Privacy

### 1. Introduction

A variety of processes that are employed in teaching and learning can be facilitated through communication tools created by SNSs. There are two categories of SNSs, including formal and informal. The latter which includes Facebook, Myspace, Friendster, Hi-5, Twitter, and Netlog has changed into a way to find new friend or maintain the recent habits (Yapıcı and Hevedanlı, 2014). University students across the world are recently using Facebook as the commonest SNS (Genç, 2010; Milošević et al., 2015). On Meantime, higher connectivity along with social process are provided by the educational SNSs, including Microblogging, Ning, Elgg, Edmodo, which focus on teaching and learning, while supporting the individual life and students' requirements (Oye et al., 2012). So far, few studies have been carried out on educational SNSs, including Edmodo, in teaching and learning.

As Creswell (2017) states, theories provide a lens through which the researchers can shape what they are searching for and raise the desired questions. Research performed previously in the field of social network has primarily concentrated on the use of Technology Acceptance Model (TAM) in the context of the present study (Hossain and de Silva, 2009; Kordestani et al., 2015). A set of beliefs regarding the technology along with a set of impressive reactions toward the behavior are considered in

TAM, while the concept of perceived consequences is not considered when the behavior is predicted in this model (Compeau et al., 1999). The focus of TAM is on the users' perspectives, while TTF concentrates on the consistency of the user's responsibilities and system qualities. Moreover, it may not be enough to solely concentrate on the users' viewpoints regarding the technology.

The theory of Task Technology Fit (TTF) is a widely adopted theory, arguing that adoption of a technologic concept will happen in the case that there a complete match between the desired technology and the tasks supported by it. Two basic constituents of this theory include task and technology characteristics. Different research works have primarily emphasized on specific task of technology characteristics of the theory and technology under consideration in order to evaluate the adoption of technology in diverse settings for instance healthcare, business, education, and economics (Asadi et al., 2019a; Asadi et al., 2015; Asadi et al., 2018; Asadi et al., 2019b; Asadi and Saedi, 2016; Dalvi-Esfahani et al., 2020; Samad et al., 2020; Yadegaridehkordi et al., 2015; Yadegaridehkordi et al., 2020; Yadegaridehkordi et al., 2019). However, no study has used the TTF theory so far to investigate how educational SNSs are adopted in higher education. Given the considerable role of educational SNSs in students' teaching and learning process, more studies are required to figure out the ways through which their