

論文名 : Research for Improvement of e-based Resources Utilization in University
Libraries in Sri Lanka:User investigation and application of integrated model of
Technology Acceptance Model and Flow Theory

(スリランカの大学図書館における電子資料活用の発展に向けた調査研究 : 利用者動向調査,
並びに TAM と Flow 理論の統合モデルの提唱)

新潟大学大学院現代社会文化研究科

氏名 BALASOORIYA MUDIYANSELAGE MENAKA CHANDANIE BANDARA
HINDAGOLLA

Technology acceptance or information system acceptance, from the user perspective, has become an important research area during last decades. In order to enhance or understand the resistance of utilizing the available information systems and services by users, university library management in Sri Lanka has struggling to find out methods to enhance the utilization of e-based resources effectively and efficiently. This study therefore attempted to investigate the undergraduate acceptance of e-based library resources use focusing the Electronic Information Resources (EIR) and Digital Libraries (DL) with the application of integrated model of Technology Acceptance Model (TAM) and Flow theory. Further, this research examined the factors that influence to accept EIR and DL from the users' perspective. That will provide opportunity to predict user behavior in terms of EIR and DL usage in Sri Lankan university library sector.

This research followed a positivist paradigm and deductive reasoning by adopting the well known theory of TAM and Flow theory and its application within the contextual setting of Sri Lankan university library sector where it is used to predict the acceptance, behavioral intentions of the undergraduate e- based library resources use. This study proposed the integrated research model to

measure factors that influence undergraduate behavioral intention to use EIR and DL in relation to object based factors, extrinsic and intrinsic factors. TAM explains about object based beliefs and extrinsic beliefs that influence ones behavior intention and actual system usage. Similarly, Flow theory explains that intrinsic beliefs influence individuals' behavior intention and change. Therefore, this study is attempted to identify what extend object based, extrinsic and intrinsic factors that influenced undergraduate behavioral intention to use e-based resources by applying integrated model of TAM and Flow.

A cross sectional survey design was used to collect data from 610 undergraduates in three universities in Sri Lanka. The survey yielded 538 usable questionnaires, with a response rate of 88%. The study data was examined using Software Package for Statistical analysis (SPSS) and Analysis of a Moment Structures (AMOS) to predict the level of acceptance of EIR and DL by social science and humanities undergraduates and to show the strengths and significances of the postulate hypotheses.

The research model was formulated with nine constructs which were derived from TAM and Flow Theory. Proposed research model for EIR and DL was tested and modified separately. The modified models evidenced by model fit data that explained 42.9% of variance in Behavior Intention to use EIR and 32.9% of variance explained by the Behavior Intention to use DL in the context of Sri Lankan university library sector.

The unified models explain the users' behavior intentions of EIR and DL in the context of university

libraries in Sri Lanka. The findings showed that extrinsic and intrinsic factors play an important role of user acceptance of EIR and DL. From the findings, four core determinants: Perceived Ease of Use (TAM), Perceived Usefulness (TAM), Perceived Abilities of user (TAM) and Perceived User Enjoyment (Flow) significantly determined Behavior Intention (TAM) to use EIR and DL. In relation to EIR acceptance, Perceived Ease of Use (TAM), Perceived User Enjoyment (Flow) and Perceived Abilities of user (TAM) were the mostly influenced. Perceived User Enjoyment (Flow), Perceived Ease of Use (TAM), and Social Influence (TAM) were the most influential factors that determined the behavior intention to use DL. It is noticeable that Facilitating Conditions (TAM) in the study context had a negative effect on the two models. The author claimed that such significant constructs should be referred in order to enhance the use of the e-based library resources.

This research provided implications for theoretical and practical for individual, organizational and national levels. Further, this research contributes to technology adoption and library and information science literature as well as help to practitioners to analyze the reasons for resistance toward e-based resources use and also help them to take efficient measures to improve user acceptance of e-based resources utilization.

Keywords: Electronic Information Resources, Digital Library, Technology Acceptance, Technology Acceptance Model, Flow Theory, Sri Lanka