Analysis of adopting an integrated DEMATEL on TAM and TTF Model

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Abstract

This study aims to explore critical factors influencing technological diffusion while organization adopts innovative information technologies. Enterprise A constructing a computer reservation system (CRS) is employed as an empirical study for analyzing the factors impacting utilization of innovative information technological system based on technology acceptance model (TAM) as well as task-technology fit model (TTF). Moreover, decision making trial and evaluation laboratory (DEMATEL) is used to examine the causality along with interdependent level between items selected in integrated TAM–TTF model, and to assist in identifying critical variables of integrated model from CRS operator’s perspective. The developed model helps managers understand key items for popularizing innovative technological information systems and formulate improvement strategies. This study contributes towards tackling the complex issues of CRS implication.

Keyword: Technology Acceptance Model, Task–Technology Fit Model, Decision Making Trial and Evaluation Laboratory, Computer Reservation System