

Construct DTPB model by using DEMATEL: a study of a university library website

李友錚, 謝宜芳, 林少斌
Technology Management
Management
ycl@chu.edu.tw

Abstract

Purpose - Traditional studies on a decomposed theory of planned behavior (DTPB) analyze the relationship of variables through a structural equation model. If certain variables do not fully comply with the independent hypothesis, it is not possible to conduct proper analysis, which leads to false conclusions. To solve these problems, the aim of this research is to adopt an expert opinion-driven decision making trial and evaluation laboratory (DEMATEL), and re-establish the causal relationship and the degree of interrelationship of DTPB variables.

Design/methodology/approach - This research used a university library website as an individual case, and illustrated the benefits of constructing DTPB model by using DEMATEL through the opinions of 23 experts surveyed by questionnaires.

Findings - According to the analysis result of constructing DTPB model by using DEMATEL, when DTPB variables were distributed within quadrants of high centrality and degree of causality, they became the key influential variables; when distributed within quadrants of low centrality and degree of causality, the variables needed urgent management.

Originality/value - When traditional DTPB does not consider the direct and indirect relationships among variables, the original causal relationship of variables will be influenced, and then the original variables cannot fully demonstrate their causal relationship. Therefore the feasibility and effect of constructing DTPB model by using DEMATEL proposed in this research are proved through individual cases.

Keyword : Decision making trial and evaluation laboratory (DEMATEL), Decomposed theory of planned behaviour (DTPB), University

library website