

Developing the Performance Evaluation Matrix for E-learning System

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Abstract

E-learning system allows learners to have complete control over the time and space of their learning, thereby eliminating the constraints of time and location on teaching and learning. Clearly, enhancing the operational performance of the e-learning system can increase learners' willingness to engage and improve their learning outcomes, attracting more dispersed learners to join and thus creating more business value and increasing economic benefits. Additionally, since customers can learn from home without the need to go out, it can reduce the environmental pollution caused by traffic impacts and carbon emissions associated with commuting. Evidently,

improving the operational performance of e-learning systems has become a significant issue. In view of this, this study will use surveys to measure learners' satisfaction and importance for each service item, then define satisfaction and importance indices and apply a performance evaluation matrix to construct an evaluation and improvement analysis model for e-learning systems. This model aims to assist operators in enhancing the operational performance of their e-learning systems. Finally, this paper will illustrate the application of the proposed model using the CALL system as an example.

Keywords

E-learning system, Satisfaction index, Important index, Performance evaluation matrix, CALL system.

Biographies

Chun-Min Yu is currently an Associate Professor of the Department of Industrial Engineering and Management at National Chin-Yi University of Technology, Taiwan, Republic of China. She received her Bachelor's degree from National Chengchi University, Taiwan; Master's degree at National Chi Nan University; Ph.D. degree in the Graduate Institute of Human Resource Management at National Changhua University of Education, Taiwan. Her current research interests include human resource management, service management, performance evaluation, quality management and fuzzy decision making. She has published in Computers & Industrial Engineering, IEEE Transactions on Semiconductor Manufacturing, Annals of Operations Research, Industrial Management & Data Systems, Total Quality Management & Business Excellence, Journal of Testing and Evaluation, International Journal of Reliability, Quality and Safety Engineering.

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