Operations management of new project development: innovation, efficient, effective aspects 李欣怡,H. H. Chen,H.-Y. Kang Industrial Engineering and System Management Management amylee@chu.edu.tw

Abstract

The integration of distribution management systems (DMS) and feeder management systems (FMS) in China has become a trend in recent years, in addition to upgrading and rebuilding the existing energy management system (EMS) and DMS. However, some management methods are different and contradictory, thus result in obstacles to innovation and effectiveness. Thus, firms still struggle to find effective process management that is associated with innovative project operations. In addition, there is no standard method to evaluate IT projects, and at least 40% of information technology (IT) projects realize no benefits. It is astonishing that none of the above-mentioned issues have been addressed or solved by previous literatures. In order to fill the vacancy, this paper first briefly introduces FMS and determines its critical success criteria, and then proposes suitable forms of organization for knowledge management (KM). It also applies process management methods according to knowledge creation mode and maturity of the project. Finally, an analytic network process (ANP) associated with benefits, opportunities, costs, and risks (BOCR) is constructed to compare the performance of different FMS projects with and without adopting the proposed methodology.

Keyword: feeder management systems (FMS); analytic network process (ANP); knowledge management (KM); benefits, opportunities, costs and risks (BOCR)