ABSTRACT

The dynamic information technology value engineering model (DITVEM) contributes to the model enhancement that can adapt to evolving challenges over time, which considers dynamic factors such as intellectual capital and firm performance measurement. The DITVEM applies the partial adjustment valuation approach with dynamic speeds of adjustment, which proposes the model constructed from four subsystems: firm performance (FP), firm core competence (FCC), firm capability (FC), and IT resources (ITR). DITVEM applies the PAV approach with dynamic speeds of adjustment using human capital efficiency (HCE) in the ITR subsystem, intellectual capital efficiency (ICE) in the FCC subsystem, capital employed efficiency (CEE) in the FC subsystem, and return on equity (ROE) Based on the evaluation, the firm strategic planning recommends the strategy focusing on the firm capability (FC) with an estimated weight percentage of 50%, and focusing on the firm core competence (FCC) with an estimated weight percentage of 30%. This strategy aims to focus on the subsystems of firm capability (FC) and firm core competence (FCC) in the planning and evaluation efforts of measuring the performance value of IT in relation to the investments expended by the firm. However, the subsystems of ITR and FP are still considered in the strategic planning, each with an estimated weight percentage of 10%. Thus, evaluating the performance value of IT aims to ensure that the investments expended by the firm can generate profits through the utilization of IT, which is considered employee competencies and the leveraging of the firm capabilities.

Keywords: dynamic information technology value engineering model (DITVEM), partial adjustment valuation (PAV), intellectual capital, firm performance measurement, firm strategic planning