The Determinant Factors of Technology Adoption for Improving Firm's Performance; Toward a Conceptual Model

Authors : Zainal Arifin, Avanti Fontana

Abstract : Considering that TOE framework is the most useful instrument for studying technology adoption in firm context, this paper will analyze the influence of technological, organizational and environmental (TOE) factors to the Dynamic capabilities (DCs) associated with technology adoption strategy for improving the firm's performance. Focusing on the determinant factors of technology adoption at the firm level, the study will contribute to the broader study of resource base view (RBV) and dynamic capability (DC). There is no study connecting directly the TOE factors to the DCs, this paper proposes technology adoption as a functional competence/capability which mediates a relationship between technology adoptions with firm's performance. The study wants to show a conceptual model of the indirect effects of DCs at the firm level, which can be key predictors of firm performance in dynamic business environment. The results of this research is mostly relevant to top corporate executives (BOD) or top management team (TMT) who seek to provide some supporting 'hardware' content and condition such as technological factors, organizational factors, environmental factors, and to improve firm's 'software ' ability such as adaptive capability, absorptive capability and innovative capability, in order to achieve a successful technology adoption in organization. There are also mediating factors which are elaborated at this paper; timing and external network. A further research for showing its empirical results is highly recommended.

Keywords : technology adoption, TOE framework, dynamic capability, resources based view

Conference Title : ICSM 2015 : International Conference on Strategic Management

Conference Location : Osaka, Japan

Conference Dates : October 08-09, 2015