## **ABSTRACT**

This research is an empirical study among big (level B) Indonesian private civil engineering constructor companies. The aim of this research is to analyze influences among variables answering the question of how to improve sustainable competitive advantage through information technology performance and technology innovation. This research gives managerial implications about what steps taken to improve information technology performance and implement technology innovation for improving the sustainable competitive advantage.

Population of this research is all big domestic private civil engineering constructor companies in Indonesia. Samples taken for this research are 133 big Indonesian private civil engineering constructor companies. It means that number of valid data used for analyzing is 88,667% of all samples. Data sent by respondent are goodness of fit analyzed using confirmatory factor analysis of structural equation modelling (SEM) to the research model based on theoritical mindset.

Result of the analysis tells that all hypothesis are accepted, showing that information technology performance and technology inovation positively influence sustainable competitive advantage. Improving human resource's skill complexity which is manifest variable of special asset complexity will improve sustainable competitive advantage through information technology performance. Meanwhile, designing information technology units integrated with companie's business and logistic which is manifest variable of business resource will improve sustainable competitive advantage through technology innovation.

Keywords: Sustainable Competitive Advantage, IT Performance, Organizational Culture, Business Resource, Technology Resource, Technology Innovation, Special Asset Complexity and Differentiation.