Abstract

It is well known that the current era’s living and work style are significantly technology driven. The usage of hi-tech systems, direct and necessitate the systems thinking and hence provides an approach towards Systems Engineering. Systems Engineering is an interdisciplinary approach and means to enable the realization of successful systems which integrates all the disciplines and specialty groups into a team effort forming a structured development process that proceeds from concept to production to operation. In this paper, the concept of System Engineering and cost estimation of software project is explored through Constructive System Engineering Cost Estimation Model. The performance level is evaluated and compared for different system engineering models with respect to a sample project. A System Engineering Cost Estimator (SECE) tool using Java Programming Language is developed for the purpose of investigative study of effort estimation on the basis of Constructive System Engineering Cost Estimation Model.


**Index Terms**

Computer Science Software Engineering

**Keywords**