

Abstract, 17th International Forum for COCOMO and Software Cost Modeling, October 2002, Los Angeles

SYNOPSIS –

Title: Estimating Accuracy Improvement Strategies and Expected Results.

This presentation will discuss a proven strategy for improving software engineering estimate accuracy. The presentation will provide an overview of an approach that focused on establishing an “automated” estimating framework (providing the size and effort estimate) and also the project management of actual effort (managing the project from the estimate). The framework uses a parametric model implemented upon a MS Excel foundation, where size is a count by complexity of estimating components and other cost drivers. The framework model serves as the ‘capture’ point of any and all information necessary to support an estimate, and provides the means to track changes in size, effort, and other information over the project life cycle. Each framework model established effort standards for these components and drivers within an equivalency class. Each equivalency class was a group of applications that shared common business functions, common technology, and the common activities performed within each application. Total effort is extended automatically within the framework model from the size counting activity and will be adjusted in future versions as the result of ‘effort adjustment factors’ being defined in conjunction with Watson Labs research activity. An example of summary results on a software development and maintenance contract performed across a globally dispersed organization will be presented indicating a 22% improvement in the number of projects meeting the accuracy targets within six months of deployment.

BIOGRAPHY -

DUANE P. EILERS, B.B.A., M.B.A., graduated from the University of Michigan and received his postgraduate degree from Golden Gate University in San Francisco. He served on active duty during the Vietnam era as an Air Force crewmember in B52s and FB-111As in the Strategic Air Command. Duane has nearly 25 years of information systems management experience. He is an executive with a comprehensive knowledge of manufacturing, distribution, and supply chain operations, an expert level competency in software and system engineering life cycle models, and has experience in the acquisition of software-intensive systems across a wide range of business domains. Duane possesses an established success record of organizational process improvement and business transformation initiatives to improve the quality, productivity and time to market of products or services. Mr. Eilers has previously provided e-business Strategy and Change consulting at IBM and is presently providing coaching, mentoring, and leadership for estimation improvement initiatives, software engineering process improvement, and the

achievement of SEI CMM goals for IBM Global Services. Mr. Eilers is based out of Chicago.