

Panel: Software Process Improvement for Small Organizations

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Many software organizations facing tough competitions struggle to develop quality software on time within budget and to satisfy business needs. As the users' needs become complicated with respect to the functional as well as non-functional requirements, developing quality software that satisfies such users' requirements in a timely manner is the main concern of the software organizations, which we believe is the goal of software engineering. For the last several decades, there have been many research and developments going on in order to meet the goal of software engineering. One of such attempts is software process improvement, which is based on the premise of that the quality of software is dependent on the quality of software process used in the development of software. For software process improvement, the current software process of the organization needs to be evaluated and then the improvement plan is established and executed to gradually reduce the gap between the current process and to-be process. There are two well-known process improvement models widely used in many organizations,

which are CMMI and SPICE. There have been many success results reported on the application of these models.

These models might be good for large organizations, but for small organizations it requires too much effort with respect to cost and human resource to afford it. In this panel, we are going to discuss the issues involved in the application of the existing SPI models to small software organizations. Usually, the small software organizations are characterized with their insufficient human resources, lack of development and supporting environment, lack of budget, and dependency to the large organizations. We will discuss how those characteristics of the small organizations will affect software process improvement activities, how each country deal with these issues, and the future plan for promoting software process improvement. Also, we deal with cultural issues involved in software process improvement, which is very important to the successful implementation of software process improvement.