A case study research on software cost estimation using experts’ estimates, Wideband Delphi, and Planning Poker technique

Abstract

This article shows a case study research that is performed to compare effectiveness of the Planning Poker and Wideband Delphi in two case studies. Although, Wide Band Delphi has been proposed many years ago and has enough supports in both industry and academic area but, Planning Poker is somewhat new. The study showed that applying these techniques in two companies which were using expert’s view for software cost estimation, increased the accuracy of cost estimation. Also, the results showed that Planning Poker led to better accuracy comparing to Wideband Delphi. However, this accuracy is not too much than Wideband Delphi, it was important that Planning Poker led to reducing financial risks of the projects comparing to Wideband Delphi. The study also showed that both Wideband Delphi and Planning Poker reduced the underestimates significantly.

Keyword: Software cost estimation; Wideband Delphi; Planning Poker; Expert’s view; Case study; Expert’s judgment; Agile software development