

# A Critical Review of Liang, TP., Liu, CC., Lin, TM and ect. 2013, Effect of team diversity on software project performance

## Introduction

Liang, Liu, Lin, etc. introduce the effects of diversity team in the software development process. This critical review will recap this article and evaluate the relations between diversity team and performance of software teamwork in all sections.

## Summary

Liang, Liu, Lin, etc. build a new model to observe how diversity team influence the software-team performance. They make 8 hypothesis which involves the three diversities: Knowledge Diversity (KD), Social Category Diversity (SD) and Value Diversity. Their results show the team conflict cannot avoid in group work. In contrast, KD improves the team performance, also due to conflict, but VD lead worse team performance. Finally, they also suggest that an appropriate task-conflict level can enhance the efficiency of a software team.

## Evaluation

In this article, authors use clear and logical writing structure to introduce the relationships between diversities and team performance. There are two primary hypotheses that authors have confirmed. For the first one, authors use major, education and department to analyse the knowledge diversity. For another interpretation, authors use three facts to investigate. Although the variables are adapted from old papers, such as the KD variables, they were defined by Teachman, Ancona and Caldwell [2,3], but they still can be adopted in general cases. In the recent paper, KD also shows high positive influence in tourism and hospital work [4]. For the SD, it includes culture fact. However, it has a different impact in different areas and time. The results of SD linkages are not significant in this paper; these results show the agreement with another study which focuses on the engineering education [5]. Finally, Culture impact was a factor I assumed to exist in the team performance. However, the education experiences decide the success of teamwork. These results offered by this article can be a useful guide for readers.

## Conclusion

In sum, this article introduces KD, SD, and VD. These three categories can make managers narrow down their problems in team performance management. In the future team management, mangers could try divide tasks by group members' KD and SD.

## Reference

[1] J. Liedtka, "Perspective: Linking Design Thinking with Innovation Outcomes through Cognitive Bias Reduction," *Journal of Product Innovation Management*, vol. 32, no. 6, pp. 925-938, 2015.

[2] Teachman, J.D. (1980), "Analysis of population diversity", *Sociological Methods of Research*, Vol. 8, pp. 341-62.

[3]Ancona, D. and Caldwell, D. (1992), "Demography and design: predictors of new product team performance", *Organization Science*, Vol. 3 No. 3, pp. 321-41.

[4] Y.-Q. Li and C.-H. Liu, "The role of network position, tie strength and knowledge diversity in tourism and hospitality scholars' creativity," *Tourism Management Perspectives*, vol. 27, pp. 136-151, 2018/07/01/ 2018

[5] M. J. Riemer, "Intercultural communication considerations in engineering education," *Global J. of Engng. Educ*, vol. 11, no. 2, pp. 197-206, 2007.