

Proceedings of the 3<sup>rd</sup> Annual World Conference  
of the Society for Industrial and Systems Engineering,  
San Antonio, Texas, USA  
October 20-22, 2014

## Evaluation of Team Quality

S. Bhagavatulla<sup>1</sup>, R. R. Bishu<sup>1</sup>, P. Thampi<sup>2</sup>, and K. G. Satheesh Kumar<sup>2</sup>

<sup>1</sup>Department of Mechanical and Materials Engineering  
University of Nebraska-Lincoln, Nebraska USA

<sup>2</sup>Ph.D Scholars Amrita School of Business, Coimbatore, India

Corresponding author's Email: [rbishu@unl.edu](mailto:rbishu@unl.edu)

**Author Note:** Dr. Bishu is a professor at the Department of Mechanical and Material Engineering at Nebraska. His areas are Ergonomics and quality control. Bhagavatulla is a quality engineer in a local company in Lincoln, Nebraska. Satheesh Kumar is the Dean, in Asian School of Business at Trivandrum, while Mr. Thambi is a management Consultant in Mumbai, India. Both he and Mr. Satheesh are Ph.D scholars at Amrita School of Business, Coimbatore, India.

**Abstract:** Competitive pressure and increasing market size have forced organizations to rely more on teams. This study has three objectives: to structure a list of attributes affecting the overall quality of a team; to use a survey tool to determine the significant ones among those attributes; and to compare between manufacturing and healthcare sectors. The data gathered were from employees working in teams in USA and China. A one-way analysis of variance and stepwise regression analysis was performed on the responses to determine team quality attributes. The ANOVA results for attributes versus teams revealed *team efficacy, team trust, personality and skills & knowledge* as significant. The stepwise regression analysis for team quality versus other attributes (for all the teams combined) showed that *job satisfaction and team trust* were significantly affecting the overall team quality. Analyses showed differences between China and USA. Due to operational difficulties, healthcare sector could not be studied.

**Keywords:** Team Quality Attributes, Teams, Manufacturing, China and USA