
Editorial

Justin R. Chimka

Department of Industrial Engineering,
University of Arkansas, USA
Fayetteville, AR 72701, USA
E-mail: jchimka@uark.edu

Biographical notes: Justin R. Chimka is an Associate Professor in the Department of Industrial Engineering at the University of Arkansas. He received his PhD degree from the University of Pittsburgh. He teaches courses in Applied Statistics and Production. He is the Editor-in-Chief of the *International Journal of Six Sigma and Competitive Advantage*.

Advances in multivariate analysis are important to quality control (QC) not just in that explicit context but generally, as model-based QC relies on theoretically appropriate and practically good statistical models. This special issue of the *International Journal of Data Analysis Techniques and Strategies (IJDATS)* devoted to multivariate analysis and QC features articles that address more specific topics including linear profile monitors, attributes control charts, response surface methodology, and missing data.

Abdella et al. present the results of comparisons across multivariate adaptive and fixed sampling alternatives to monitoring linear profiles. Laungrungrong et al. introduce a one-sided multivariate EWMA chart for detecting an increase in the Poisson parameter. Goethals and Cho consider skewness in the context of response surface methodology. Mitra and Clark propose estimators based on residuals that help to identify location shifts. Smith et al. introduce a quadratic program to solve the problem of missing data in multiple linear regression.

Special thanks to Editor-in-Chief John Wang for the opportunity to bring this special issue before the readership of *IJDATS*. Also thanks to Qianmei Feng of the University of Houston for serving as an important external reviewer. Finally, thanks to the Quality, Statistics and Reliability section of INFORMS for publicising the call for papers.