

# **The correlation between choice of performance measures and organisational performance: a study of the oil and gas industry**

**Masha N. S. Menhat**

School of Maritime and Business Management  
University of Malaysia Terengganu  
21030 Kuala Terengganu, Malaysia  
mashanur@gmail.com

**Yahaya Yusuf and Chris Pyke**

Lancashire School of Business and Enterprise  
University of Central Lancashire  
Preston, UK  
[yyusuf@uclan.ac.uk](mailto:yyusuf@uclan.ac.uk) and [cpyke2@uclan.ac.uk](mailto:cpyke2@uclan.ac.uk)

## **Abstract**

The aim of this paper was to explore the prevalence of the use of performance measures in the oil and gas industry and their impacts on organisational performance. A questionnaire survey was designed with a set of performance measures that was developed based on earlier a combination of literature review and exploratory interview of practitioners. These measures comprise of financial measures, operational measures, safety measures, environmental and social responsibility measures. The questionnaire was distributed amongst 550 oil and gas companies in the UK and 120 companies in Malaysia. The response rate was 17%. A correlation analysis was conducted using SPSS to evaluate the impact of the choice of performance measures on the actual organisational performance. This study reveals the prevalence of performance measures in the Oil and Gas industry based on the level of importance. In addition, it shows that performance measurement framework has a significant positive correlation with the overall organisational performance. As little research has been conducted on performance measurement within the oil and gas industry, these findings provides additional insights into the usage and roles of performance measurement in the industry. Further research can be conducted to investigate the most influential measures in determining overall organisational performance in this industry. This study provides some guidance to practitioners with regards to the potential of specific measures in enhancing overall organisational performance.

## **Keywords**

Performance, measures, oil, gas, industry

**Masha Nur Salsabiela Menhat** is a Senior Lecturer at the University of Malaysia Terengganu, Malaysia. Prior to her academic career, she worked in the oil and gas industry with responsibility for the management of local and international projects, contract management for offshore transportation, installation, hook up and commissioning phase. She holds a Bachelor Degree in Civil Engineering from Universiti Malaysia Pahang and a Master Degree in Engineering Management from Universiti Putra Malaysia. She obtained a PhD from the University of Central Lancashire, Preston, United Kingdom, in 2018 with a thesis entitled Performance Measurement Framework for the oil and gas supply chain. When she was in the UK, she played an active role in supporting local charity programmes and did voluntarily work in a local school. She loves travelling, reading, martial arts and always passionate about self-development programmes.

**Yahaya Yusuf** is a Professor of Logistics and Operations Management at the University of Central Lancashire, Preston, UK and was previously, Senior Lecturer, Operations Management, University of Hull Business School and Lecturer, School of Engineering, University of Exeter. Prof Yusuf holds a First Class degree in Mechanical Engineering from Bayero University Kano, MSc in Production Engineering from Ahmadu Bello University, and worked in industry, as a Production Engineer, prior to obtaining a PhD in Operations Management from the University of Liverpool. His main research interests include strategic operations management, Supply chains management, Enterprise information systems and Performance measurement systems. Professor Yusuf has published in a number of well-established journals including the International Journal of Operations and Production Management, International Journal of Production Economics, and European Journal of Operational Research. He has attracted research funding from the UK Engineering and Physical Science Research Council (EPSRC), the British Council and the UK Department of Trade and Industry (DTI). He is currently a member of the EPSRC Peer Review College.

**Christopher Pyke** is Executive Dean and Professor of Accounting & Finance at the Lancashire School of Business and Finance, University of Central Lancashire. Professor Pyke is a professionally qualified accountant (FCCA and CIPFA) and started teaching in higher education in 1995. He has worked at Liverpool John Moores University, University of Chester and Manchester Metropolitan University. His main research interests include: costing and pricing, good governance, measuring downside risk, development economics and performance measurement.