
Editorial

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Industrial maintenance is no longer seen as a mere cost object, but as a value-adding activity that must be systematically managed to support the objectives of supply chains and to increase the productivity and competitiveness of companies. Optimal maintenance management calls for modern solutions in maintenance performance measurement because reliable and valid indicators are needed to support the decision-making. Turning the research field yet challenging, maintenance decision-making most often requires understanding of both technical and business related systems.

The yearly Maintenance Performance Measurement and Management (MPMM) Conference aims at contributing to the above-mentioned challenges through gathering the experts from around the world to discuss their thoughts and research results. The 3rd MPMM Conference was organised at Lappeenranta University of Technology, Finland in September 2013. The three main topics of the event were maintenance performance and value, maintenance technology and knowledge management, and maintenance innovations. Participants came from 12 different countries, and the

academic sessions were interlinked with business through a practitioners' workshop. According to the feedback, the conference participants enjoyed the small conference, the size of which promoted networking. The advantages of the conference were a great atmosphere and the range of topics. The participants were provided with an opportunity to conduct in-depth discussions on topics related to maintenance.

This special issue contains some of the best scientific papers presented in MPMM 2013. The conference papers were presented after a double-blind peer review, and all six manuscripts published in this issue have been further improved after the conference on the basis of a full review process.

In the first article, the authors introduce a generic asset maintenance maturity model to assess organisations' capabilities in maintenance decision-making. To support maintenance performance measurement and benchmarking, a weighted score for maintenance performance is presented.

The second article focuses on inter-organisational maintenance relationships between customer companies and maintenance service providers. The authors use a survey to verify the most important value elements of maintenance services from the perspective of the customers and the service providers. The discovered similarities and differences can be used in maximising the total value in the maintenance business relationship.

The authors of the third article propose a framework based on a maintenance business model which is seen as a link between formulating and executing a maintenance strategy. The paper contributes to the added value of maintenance as regards the performance of the whole company.

In the fourth article, an optimisation model is proposed to estimate the economic lifetime of a drilling machine. The economic replacement time is identified on the basis of purchase price, maintenance and operation costs and second-hand value.

The fifth article addresses modelling methods of the exploitation future in maintenance decision-making. The focus is on using scenario methods in the management of network technical systems maintenance. Although these methods have been previously used in macro level research, the author shows that applying them in individual technical systems still has unrevealed potential.

In the sixth article, asset investment decisions are approached with a semi-quantitative logic. The authors recognise the impact of market demand and competitive situation on the asset investment strategy.

Overall, this special issue highlights the importance of maintenance and engineering asset management to the performance of the whole company or even inter-organisational business. Maintenance should not be treated as a separate function but as an inherent part of business process life cycle and strategy formulation. This way the value-adding potential of maintenance can be best utilised.

We wish to thank Professor Jayantha P. Liyanage, the Editor-in-Chief of *IJSEAM*, for the opportunity to prepare this special issue. Thank you also to the authors and the reviewers who have contributed to the conference and the articles included in this issue.