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# Proceeding

The 5<sup>th</sup> International Seminar  
on Industrial Engineering and Management (5<sup>th</sup> ISIEM)

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# FOREWORD

This issue is published in line with the Fifth International Seminar on Industrial Engineering and Management (5<sup>th</sup> ISIEM). The theme to this seminar is “Innovation in Technology, Information, and Management Concerning Worldwide Economic Challenge”. The articles cover a broad spectrum of topics including **Quality Engineering and Management, Supply Chain Management, Operation Research, Decision Support System and Artificial Intelligence, Production System, Industrial management, and Ergonomics**. The articles provide an overview of critical research issues reflecting past achievements and future challenges.

Full papers were reviewed by peer reviewers and finally we published 80 titles. This issue and seminar become special as more delegates come and join from various country as well as universities. We host 77 delegates both from abroad and local.

First and second ISIEM are hosted only by three universities, namely Trisakti, Esa Unggul and Gunadarma Universities. This year event, it's hosted by **seven** universities, i.e. Atma Jaya Catholic University of Indonesia, Trisakti University, Esa Unggul University, Pasundan University, Al-Azhar Indonesia University, Tarumanagara University, and last but not least, De La Salle Manado University

In this occasion, let us give special thank to Mr Marcus Pitt, President Director PT SOHO Industri Pharmasi and Assoc. Prof. Dr. Chuvej Chansa-ngavej, Director, SIU Research Center Program Director - PhD in Management Science, School of Management Shinawatra University (SIU International), Thailand. Your contribution to this seminar as reviewers and as keynote speakers makes this event more valuable. We are also grateful to all reviewers, for their commitment, effort and dedication in undertaking the task of reviewing all of the abstracts and full paper. Without their help and dedication, It would not be possible to produce this proceeding in such a short time frame.

We want to thank all those who submitted papers for review and those whose papers were chosen for presentation at the seminar and those who submitted manuscripts to be published in this proceeding. We highly appreciate all members of committee director, steering committee and organizing committee for mutual efforts and invaluable contributions for the success of the seminar.

Finally, have intensive discussion in this seminar and enjoyable stay in Manado

Vivi Triyanti ST. M.Sc  
(Atma Jaya Catholic University of Indonesia)

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