18th QMOD-ICQSS & KSQM
International Joint Conference
On Quality and Service Sciences

Creating a Sustainable Future through Quality
October 12-14, 2015, Yonsei University, Seoul, Korea

18th QMOD-ICQSS & KSQM
International Joint Conference
On Quality and Service Sciences
Proceedings

18th QMOD-ICQSS Conference
International Conference on Quality and Service Sciences
12th- 14th October 2015, Seoul, Republic of Korea

Edited by
Su Mi Dahlgaard-Park, Dr. Prof. Lund University
Jens J. Dahlgaard, Dr. Prof. Linkoping University

Technical Assistance
Insu Cho, Dr. Yonsei University

Publisher: Lund University Library Press

“This work was supported by the Korean Federation of Science and Technology Societies(KOFST) grant funded by the Korean Government.”
It is our great pleasure to welcome all participants from 30 countries and 5 continents to the 18th QMOD/ICQSS conference. The conference has attracted contributions from relevant fields of management, engineering, marketing etc. with many important empirical contributions helping us to understand limitations of existing knowledge and to develop new theories.

The main theme of this 18th QMOD conference is ‘Creating a Sustainable Future through Quality’

These days there is an increasing interest in sustainability all over the world due to several reasons. Almost every day we are bombarded with news showing us how dramatic changes are occurring and how the ecological balance is continuously threatened. Although we have been talking about the importance of stakeholder orientation, we have seen too many dramatic consequences of unbalanced shareholder orientation. The global financial crisis was such a case which awakened not only the importance of economic sustainability but also the linkage between economic and other sustainability. Stakeholder orientation, corporate governance as well as corporate social responsibility have been recognized as some possible solutions in moving towards sustainable corporations.

Actually the concept of sustainability - the ability to sustain – has always been one of the main goals for working with quality regardless we are working with products, processes, people or organizations. We may say that sustainability has always been an embedded part of the concept of quality. It is not a coincidence that there are many common understandings between sustainability and quality because both sustainability and quality management requires a long term view. Both areas need to have a focus on processes in order to control, prevent, maintain and improve and both are stakeholder-oriented management concepts.
During the last many decades the fields of quality and service management have not only ‘survived’ but evolved and expanded hugely as results of continuous efforts and contributions made by researchers and practitioners. Although much new experience and knowledge has been accumulated over the last many decades, dramatic and fundamental changes with unseen speed in our environments, societies and in the global business arena request even more focus on the issue of sustainability.

As quality and sustainability are closely related concepts quality professionals as well as academicians have great potentials to contribute in creating a more sustainable future. The 18th Annual QMOD-ICQSS in Seoul will provide a forum for exploiting and exploring existing knowledge and methods as well as new solutions through sharing and interaction between participants. In this event, several excellent case studies of global leading companies such as Samsung, Hyundai, LG and others will be presented, and we will have an opportunity to discuss how and what they are doing well.

This year’s QMOD Conference will take place as part of the 50 years anniversary celebrations of Korean Society for Quality Management (KSQM). This society has had a leading role in training, education, advising and inspiring Korean companies on their long quality journey for achieving excellence and prosperity. Without this society Korea could not have achieved what they did during the last 50 years.

Congratulations to KSQM from both of us and surely also on behalf of all conference participants.
The “Yonsei Legacy” is unique and powerful. It blends a long and illustrious tradition of academic excellence with a liberal and progressive vision for the 21st century. Since its establishment in 1885, Yonsei University has been at the forefront of higher education and research. Today, Yonsei is internationally recognized as one of the most innovative and globalized universities in the world.

It has also long been Korea’s window to the world. For well over a century, Yonsei has served as a principal conduit of knowledge between Korea and the rest of the world. It is this legacy that has been responsible for Yonsei’s growth and stature. The same legacy will enable Yonsei to reach new heights and assume a greater role in Korea and the world in the future.

Yonsei’s faculty and students are the bearers of its commitment to produce world-class leaders. Yonsei has been taking the lead in enhancing the international quality of education and research; it is now widely recognized as one of Asia’s top universities. Its 300,000 graduates are serving in leadership positions in both public and private sectors across the globe. They are key players setting new international standards in their respective fields.

Dear participants, it’s my sincere pleasure to welcome you to the 18th QMOD-ICQSS & KSQM conference in Yonsei University. I hope that you will discuss in many of the interesting sessions and topics this conference is offering.
It is an honor and a pleasure to welcome you all for this 18th QMOD-ICQSS & KSQM International Joint conference. I thank you for the delegates from foreign countries as well as the members of KSQM. I hope you enjoy this beautiful fall weather in Seoul as well as sharing professional insights on rapidly evolving quality issues.

In today’s economy, technology, quality, and brand are becoming three dominating factors for sustainability. Since brand power comes from the combination of both technology and quality, we can conclude that technology and quality are the leading edges. I believe that the two factors had been fundamental factors for most leading nations and excellent companies. I hope we can share professional research ideas in this conference about combining quality and technology. Those integrating efforts will be able to provide most creative and powerful skills to industries in the future.

On behalf of KSQM, I would like to express special thanks to Dr. Jens Dahlgaard and Prof. Su Mi Park for their dedication to this conference, Dr. Sangmoon Lee and CEO Youngmok Kim for their keynote speeches, and all the organizing committee members for their support and thorough preparation from the beginning to this point. I wish every participant the very best of joy and prosperity.

Thank you.
Conference Founders and Chairs

Dr. Prof. Jens J. Dahlgaard, Linköping University, Sweden
Dr. Prof. Su Mi Dahlgaard Park, Lund University, Sweden

Local Conference Organizers

Chairs: Dr. Sung Hyun Park (President, Korean Academy of Science and Technology)  
Dr. Prof. Wan Seon Shin (President, The Korean Society for Quality Management)  
  » Dr. Prof. Sangbok Ree (Seokyeong Univ., Korea)  
  » Dr. Prof. Sang Chan Park (Kyanghee Univ., Korea)  
  » Dr. Prof. Heejun Park (Yonsei Univ., Korea)  
  » Dr. Prof. Dong Hyun Baek (Hanyang Univ., Korea)  
  » Dr. Prof. Suneung Ahn (Hanyang Univ., Korea)  
  » Dr. Prof. Soo Wook Kim (Seoul National Univ., Korea)  
  » Dr. Prof. Youn Sung Kim (Inha Univ., Korea)  
  » Dr. Prof. Young Hyun Park (Kangnam Univ., Korea)

Hosting University

Yonsei University, Seoul

Scientific Committee

Dr. Prof. Su Mi Dahlgaard-Park, Lund University, Sweden
Dr. Prof. Jens J. Dahlgaard, Linkoping University, Sweden
Dr. Prof. Heejun Park, Yonsei University, Korea
Dr. Prof. Wan Seon Shin, Sungkyunkwan University, Korea
All session chairs (see program)
Plenary Speakers’ and Chairs’ Profiles

**Jens J. Dahlgaard, Professor, Sweden**, is professor at the Division of Quality Technology and Management, Linköping University, Chief editor of the Total Quality Management and Business Excellence and distinguished visiting professor at Yuan Ze University, Taiwan. Before he joined Linköping University he was a chair professor in Quality Management at Aarhus University, Denmark. He has published 15 books and over 200 research articles. He received many awards among others the European Quality Award for supervising the best master thesis on Total Quality Management in 1994, 1996 and 1997, the Chinese Friendship Award in 1998 and the Lancaster Award by American Society for Quality (2005). Professor Dahlgaard is an Academician and previous Vice President of the IAQ (International Academy of Quality). He has lectured in all continents and is active as adviser to many organizations and government bodies in many countries.

**Sung H. Park, Professor, Korea**, is now the president of Korean Academy of Science and Technology, and a member of Presidential Advisory Council of Science and Technology in Korea. He served as the director in the Directorate for Basic Research in Science and Engineering, National Research Foundation of Korea during 2010-2012. He is now actively involved in S&T (Science and Technology) promotion of Korea.

He has published more than 50 books on statistics and quality management including four books in English; “Robust Design and Analysis for Quality Engineering” (Chapman & Hall, 1996), “Statistical Process Monitoring and Optimization” (Marcel Dekker, 1999), “Six Sigma for Quality and Productivity Promotion” (Asian Productivity Organization(APO), 2003), and “Robust Design for Quality Engineering and Six Sigma (World Scientific, 2008). His three books in Korean, “Modern Design of Experiments”, “Regression Analysis”, and “Statistical Quality Control”, have been the best sellers since their appearance until now. He is really the pioneer in the area of industrial statistics in Korea.
Dr. Park graduated from Seoul National University, Korea, in 1968 with a Bachelor of Science in Chemical Engineering. In 1970 he went to the USA to study Operations Research for his Master of Science Degree, and Statistics for his Ph.D. degree at North Carolina State University (NCSU). After graduating from NCSU in 1975, he went to Mississippi State University as an assistant professor, and then returned to his country, Korea, in 1977. Since 1977 he has served as an associate professor and then as a professor in statistics at Seoul National University (SNU). He has retired from SNU in 2010, and now he is an Emeritus Professor of SNU in statistics. He is the only one academician (regular member) of IAQ (International Academy for Quality) from Korea.

He was the president of the Korean Society for Quality Management, the Korean Statistical Society as well as the Korean Society for Sustainability Science. He received two prestigious medals from Korean Government; one is ‘Order of Service Merit, Red Stripes Medal’ for his contribution to quality management in 2000, and another is ‘Order of S&T Merit, Hyeoksin Medal’ for his contribution of S&T for Korea in 2015. He also served as Dean of College of Natural Sciences, SNU, during 2000-2002, and as the chairman of Faculty Council of SNU during 2005-2007.

Sang M. Lee, Professor, USA, is the University Eminent Scholar and a Regents’s Distinguished University Professor emeritus at the University of Nebraska-Lincoln, USA. His seminal research on multiple objective decision making, global strategy, and innovation through convergence has been globally recognized. He has published 70 books, over 350 journal articles, visited more than 200 universities in some 65 countries as a distinguished visiting scholar, and produced 140 Ph.D. students. He served as President of the Decision Sciences Institute (DSI) and is currently serving as President of the Pan-Pacific Business Association (PPBA). He is a Fellow of the Academy of Management, DSI, and PPBA. He is Editor-in-Chief of two Springer Publisher journals: Service Business and International Journal of Quality Innovation. He is a...
Senior Scientist of the Gallup Organization and has served as a consultant for many business and governmental organizations. He has received 5 honorary doctorates for his contribution to global business education.

Young Mok Kim
SVP, Hankook Chinaware Group
CEO, Hankook Chinaware Living

Portland, Oregon, Lewis&Clark University Fine Art Bachelor’s degree
St. Louis, Missouri, Washington University MFA Fine Art Master’s degree
New York University Doctoral degree
Korea University Business School MBA Business administration Master’s degree
MK(Meail Kyungje) Creative leader ‘MK Creative forum’ leadership lecture
Prime Minister citation (2011)
China, Xian 13th Korea.China Quality Management Association lecture

Su Mi Dahlgaard-Park, Professor, Sweden is professor at Institute of Service Management, Lunds University and distinguished visiting professor at Yuan Ze University, Taiwan. She has published more than 150 research papers and books. She has received Literati Award for Outstanding Paper in 2007, elected as academician of IAQ (International Academy for Quality). Currently she is devoted as general editor for Encyclopedia of Quality and the Service Economy which is published in 2015 by Sage publication. She is also serving as chief-editor of the International Journal of Quality and Service Sciences and as associate editor for the Asian Journal on Quality as well as for TQM and Business Excellence. She also serves on the editorial boards of ten renowned research journals. She has lectured in many universities as invited professor and she is often invited as plenary speaker. She serves as adviser in many organizations and is active in conducting executive seminars worldwide.
Wan Seon Shin, Professor, Korea, is Professor in the Department of Systems Management Engineering at Sungkyunkwan University, Korea. He is also President of the Korean Society for Quality Management. His teaching and research interests include quality management, service strategy, and strategic decision making. His research has been supported by diverse organizations such as the Korean Agency for Technology and Standards (KATS), The Defense Agency for Technology and Quality (DTaQ), Korea Telecom (KT), Korea Electrical Power Company (KEPCO), Korea Research Foundation (KRF), Samsung, POSCO, Hana Financial Group, and Kolon Industries.
QMCD-ICQSS & KSQM 2015
PROGRAM
# QMOD-ICQSS & KSQM 2015 PROGRAM

## 12th October 2015, Monday

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<th>Time</th>
<th>Event</th>
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<tr>
<td>09:00~17:00</td>
<td>QMOD-ICQSS &amp; KSQM REGISTRATION, CONFERENCE CENTER</td>
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<tr>
<td>10:00~10:30</td>
<td>CONFERENCE OPENING, ROOM: Grand Ballroom, Backyang-ro</td>
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<tr>
<td>10:30~12:00</td>
<td>PLENARY SESSION 1, ROOM: Grand Ballroom, Backyang-ro</td>
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<td>12:00~14:00</td>
<td>LUNCH</td>
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<tr>
<td>14:00~15:30</td>
<td>PARALLEL SESSIONS 1: Healthcare 1, Performance Management 1, Consumer Identity, Values and Behaviors 1, TQM Practice, Process Design and Improvement 1</td>
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<tr>
<td>15:30~16:00</td>
<td>COFFEE BREAK</td>
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<tr>
<td>16:00~17:30</td>
<td>PARALLEL SESSIONS 2: Healthcare 2, Performance Management 2, Consumer Identity, Values and Behaviors 2, Lean, Six Sigma, Process Design and Improvement 2</td>
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<tr>
<td>18:00~20:30</td>
<td>WELCOME RECEPTION, ROOM: Grand Ballroom, Backyang-ro</td>
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## 13th October 2015, Tuesday

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<td>PARALLEL SESSIONS 3: Healthcare 3, Performance Management 3, Quality Management System 1, Organization Culture, Learning, Innovation 1, Process Design and Improvement 3</td>
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<tr>
<td>10:30~11:00</td>
<td>COFFEE BREAK</td>
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<td>11:00~12:30</td>
<td>PLENARY SESSION 2, ROOM: Grand Ballroom, Backyang-ro</td>
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<td>LUNCH</td>
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<td>14:00~15:30</td>
<td>PARALLEL SESSIONS 4: Quality in Higher Education 1, Service Quality, Quality Management System 2, Organization Culture, Learning, Innovation 2, Process Design and Improvement 4/Organizational Psychology and Motivation</td>
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<tr>
<td>15:30~16:00</td>
<td>COFFEE BREAK</td>
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<tr>
<td>16:00~17:30</td>
<td>PARALLEL SESSIONS 5: Quality in Higher Education 2, Service Innovation, CSR, Sustainability, Quality Management System 3, Quality of Life, Design of Experiments, SQC, Statistical Engineering</td>
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<td>18:30~21:00</td>
<td>GALA DINNER (Global Excellence Award &amp; CQO Award, BEST PAPER AWARDS AND QMOD 2016 ANNOUNCEMENT, ROOM: Grand Ballroom, The War Memorial of Korea)</td>
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- Global Excellence Award Winner: Sung-Soo Kim (ZENHANKOOK Co., Ltd.) & Lee, Yoon Jong (AJU CAPITAL Co., Ltd.)
- CQO Award Winner: Moon, Dong Hwan (Hankook Tire Co., Ltd.)

## 14th October 2015, Wednesday

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<tr>
<td>09:00~15:00</td>
<td>COMPANY VISIT OR SEOUL CITY TOUR</td>
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PLENARY SESSION 1 & 2

12th October 2015, Monday

10:30~12:00 PLENARY SESSION 1, Grand Ballroom, Backyang-ro

SESSION CHAIRS: Su Mi Dahlgaard-Park (Lunds University, Sweden)

1. Cooperation Plans through Quality and Sustainability among Asian Countries
   Sung H. Park (KAST, Korea)

2. Winning by Creative Quality
   Yeongmok Kim (Hankook Chinaware, Korea)

13th October 2015, Tuesday

11:00~12:30 PLENARY SESSION 2, Grand Ballroom, Backyang-ro

SESSION CHAIRS: Wan Seon Shin (Sungkyunkwan University, Korea)

1. QUALITY INNOVATION FOR CREATING A SMART FUTURE
   Sang M. Lee (University of Nebraska Lincoln, USA)

2. A Green House Approach for Value Cultivation
   Jens J. Dahlgard (Linkoping University, Sweden)
12th October 2015, Monday

14:00~15:30 PARALLEL SESSION 1, Healthcare 1

SESSION CHAIRS: Noor Hazilah Abd Manaf (IIUM, Malaysia)

1. Improving the efficiency and effectiveness of ward rounds on a Danish Haematology Department
   Birgitte Enslev Jensen, Pauline Found, Sharon Williams, Paul Walley (Denmark)

2. A matrix of the functions and organizations that ensure continued healthcare services in a disaster
   Chisato KAJIHARA, Masahiko MUNECHIKA, Masataka SANO, Haizhe JIN (Japan)

3. A study on the mechanism and countermeasures of medical devices incidents
   Haizhe Jin, Masahiko Munechika, Masataka Sano, Chisato Kajihara, Masaaki Kaneko, Fu Guo (Japan)

4. Do satisfied employees lead to satisfied patients? An empirical study in an Italian hospital
   Hendry Raharjo, Roberta Guglielmetti Mugion, Laura Di Pietro, Martina Toni (Sweden)

14:00~15:30 PARALLEL SESSION 1, Performance Management 1

SESSION CHAIRS: Sung Hyun Park (Korean Academy of Science and Technology, Korea)

1. A conceptual framework for assessing the potential impact of management systems on corporate performance
   Colin Raßfeld, Roland Jochem (Germany)

2. Shop floor time management within the automotive industry: actual versus targeted time allocation
   Iuga Maria Virginia, Claudiu Vasile Kifor, Ioan Bondrea (Romania)

3. A literature review of dynamic analysis for the enhancement of competitiveness in small and medium sized companies
   Hong Joo Lee, Choon Burn Yoo (Korea)

4. A Study on the Success Factors for Restaurant Service Industry: Moderating effect of Restaurant Type and Location
   Kyu-Suk Chung, Seung-Pyo Hong, Jeong-Hee Hwang, Myoung-Soo Kim (Korea)
# 12th October 2015, Monday

## PARALLEL SESSION 1: Consumer Identity, Values and Behaviors 1

**SESSION CHAIRS:** Zhen He (Tianjin University, China)

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<tr>
<th>#</th>
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<tbody>
<tr>
<td>1</td>
<td>The effect of received word-of-mouth on consumer emotions and choice: Findings from a service industry</td>
<td>Anne Martensen, Lars Grønholdt (Denmark)</td>
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<tr>
<td>2</td>
<td>A Hierarchy Model of Quality-, Recognition-, Elite-oriented Beliefs with Value, and Behavioural Intention of Luxury Goods Consumption</td>
<td>Chi-Hsien Kuo, Shin'ya Nagasawa (Japan)</td>
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<td>3</td>
<td>Are Customers Willing to Pay for Corporate Social Responsibility? A Study of Individual-Specific Mediators</td>
<td>Yuen, Kum Fai, Thai, Van Vinh (Singapore)</td>
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<td>4</td>
<td>Cultural difference of customer equity drivers on customer loyalty: A cross-national comparison between South Korea and United States</td>
<td>Yong Soo Jang, Jaehyeon Jun, Heejun Park, Luis Vilela Pimentel (Korea)</td>
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## PARALLEL SESSION 1: TQM Practice

**SESSION CHAIRS:** Kristen Snyder (Mid Sweden University, Sweden)

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<td>1</td>
<td>Lessons from the history of Samsung’s supply chain management innovations: Focus on the TQM perspective</td>
<td>Uk Jung, Byung Do Chung (Korea)</td>
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<td>2</td>
<td>The Challenge and Response in Quality Management at Hyundai Motor in 2000s</td>
<td>Young-suk Hyun (Korea)</td>
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<td>3</td>
<td>Exploring the Role of Core and Infrastructure Quality Management Practices in Ambidexterity</td>
<td>Muhammad Asif, Muhammad Usman Awan (Saudi Arabia)</td>
</tr>
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<td>4</td>
<td>An analysis of UAE Quality Winners : A case study</td>
<td>Flevy Lasrado, Boštjan Gomišček (UAE)</td>
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# QMOD-ICQSS & KSQM 2015 PROGRAM

**12th October 2015, Monday**

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<th>14:00~15:30</th>
<th>PARALLEL SESSION 1, ♣ Process Design and Improvement 1</th>
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<tr>
<td><strong>SESSION CHAIRS:</strong> Omar J. Purata (Universidad de Guanajuato, Mexico)</td>
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</table>
| **1** | Design of a Failure Recording Method for Technical Products  
Malte Schröder, Björn Falk, Robert Schmitt (Germany) |
| **2** | A parameter-free method for noise detection and its application to semiconductor wafer inspection  
Jihyun Ha, Jong-Seok Lee, Wan Seon Shin (Korea) |
| **3** | Customer requirement system for vehicle product development plan By KANO’s model and QFD  
Marisa Germprapai, Natcha Thawesaengkulthai (Thailand) |
| **4** | What SERVPERF in Recruiting Website Does Determine Users’ Perceived Value, Satisfaction, and Revisit Intention in Korea?  
Chul-Ho Cho, Jae Hoon Hyun (Korea) |

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<th>16:00~17:30</th>
<th>PARALLEL SESSIONS 2, ♣ Healthcare 2</th>
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<tr>
<td><strong>SESSION CHAIRS:</strong> Masahiko Munechika (Waseda University, Japan)</td>
<td></td>
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</table>
| **1** | An approach to facilitate the safety signal detection efforts in pharmaceutical R&D  
Hirotaka Inoue, Shu Yamada (Japan) |
| **2** | Patient value of primary care in Lean healthcare context  
Malgorzata Fialkowska-Filipek (Poland) |
| **3** | A Method for Diagnosing Healthcare Provision Process Based on Failure Cases  
Masaaki Kaneko (Japan) |
| **4** | MEDICAL TOURISM: MIRACLE OR MIRAGE?  
Noor Hazilah Abd Manaf, Selamah Abdullah, Intan Zanariah Zakaria (Malaysia) |
### Performance Management 2

**16:00~17:30**

**SESSION CHAIRS:** Claudiu Vasile Kifor (Lucian Blaga University Sibiu, Romania)

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<td>1</td>
<td>Measurement and Evaluation of as Relevant Perceived Product Descriptors</td>
<td>Michael Brusch, Katrin Baumert, Luisa Illner (Germany)</td>
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<tr>
<td>2</td>
<td>New Concept for Project Management based Competencies Development in the Field of Industrial Product Service Systems (IPSS)</td>
<td>Nadine Schlüter, Nicole Schlüter (Germany)</td>
</tr>
<tr>
<td>3</td>
<td>A comparative study of product and process innovation patterns between manufacturing and service firms in Korea</td>
<td>Yong Won Seo, Youn Sung Kim, DaeSoo Kim, Yung-Mok Yu, Sung Hee Lee (Korea)</td>
</tr>
<tr>
<td>4</td>
<td>A framework for building an evaluation model for luxury products</td>
<td>Youn Sung Kim, Jeongil Choi, Jin-Young Sirh, Youngmok Kim (Korea)</td>
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### Consumer Identity, Values and Behaviors 2

**16:00~17:30**

**SESSION CHAIRS:** Heejun Park (Yonsei University, Korea)

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<td>1</td>
<td>Marketing mix induced word-of-mouth and its impact on consumer responses in a service industry</td>
<td>Anne Martensen, Jan Mouritsen, Christine Madelene Bentzen &amp; Thora Kristine Sørensen (Denmark)</td>
</tr>
<tr>
<td>2</td>
<td>What customers want? – Determining of requirements and their relevancies!</td>
<td>S. Popowsky, A. Kawald, D. Döbröck, B. Rich, R. Wolf (Germany)</td>
</tr>
<tr>
<td>3</td>
<td>A quality requirement analysis method using content analysis of SNS</td>
<td>Tae-woo Kim, Dong-hyun Baek (Korea)</td>
</tr>
<tr>
<td>4</td>
<td>A Comparative Study of Consumer Demand for High-Value Product Quality</td>
<td>Kana Sugimoto, Shin’ya Nagasawa (Japan)</td>
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12th October 2015, Monday

16:00~17:30 PARALLEL SESSION 2, Lean, Six Sigma

SESSION CHAIRS: Fotis Vouzas (UNIVERSITY OF MACEDONIA, GREECE)

1. Conceptualizing a research framework to study systemic Lean transformation: A Critical Review
   Kristen Snyder, Pernilla Ingelsson, Ingela Bäckström (Sweden)

2. LEAN SERVICE IMPLEMENTATION SUCCESS FACTORS
   Krystyna Lisiecka, Iwona Burka (Poland)

3. An empirical investigation of the relationship between Six Sigma practices and organizational innovation: evidence from China
   Zhen He, Yujia Deng, Min Zhang, Xingxing Zu, Jiju Antony (China)

4. DFSS Methodology for the Service Industry at Samsung Group
   C.M. Kim, S.H. Lee, E.S. Cheon, U. Jung (Korea)

16:00~17:30 PARALLEL SESSIONS 2, Process Design and Improvement 2

SESSION CHAIRS: Bostjan Gomiscek (University of Wollongong in Dubai, UAE)

1. Challenges, Design and Assessment of a data oriented Complaint and Failure Management
   Robin Tuertmann, Maximilian Ruessmann, Malte Schröder, Alexander Linder, Robert Schmitt (Germany)

2. Graphical description of processes as a tool for the integration of standardized management systems
   Omar J. Purata (Mexico)

3. A Study on Recall Policies for Product Safety and their Improvements in Korea
   Kyungok Huh, Chul Choi (Korea)

4. Process based system models – a stakeholder based improvement philosophy
   Raine Isaksson (Sweden)
13th October 2015, Tuesday

09:00~10:30 PARALLEL SESSION 3, Healthcare 3
SESSION CHAIRS: Fernando Padro (University of Southern Queensland, Australia)

1. Development of Assessment Item for Area Resilience for Healthcare with SERVQUAL
   Masataka Sano, Masahiko Munechika, Chisato Kajihara, Masaaki Kaneko, Haizhe Jin (Japan)

2. Determinants of Healthcare Utilisation among the elderly in Malaysia
   Noor’a’ain Mohamad Yunus, Noor Hazilah Abdul Manaf, Azura Omar (Malaysia)

3. Education as a catalyst for healthcare transformation
   Bo Bergman, Andreas Hellström, Svante Lifvergren (Sweden)

4. Failure Demand: An evaluation of concept in UK Primary Care
   Paul Walley, Sharon Williams, Pauline Found (UK)

09:00~10:30 PARALLEL SESSION 3, Performance Management 3
SESSION CHAIRS: Shin’ya Nagasawa (Waseda University, Japan)

1. DEVELOPMENT OF A MODEL OF BUSINESS PERFORMANCE MEASUREMENT SYSTEM FOR ORGANISATIONAL SELF-ASSESSMENT: THE CASE OF POLAND
   Rafał Haffer, Aldona Glińska-Neweś (Poland)

2. Identifying Industry-Specific Components of PL response system using Delphi-AHP Method
   Jun-Hyeok Seo, SungMin Bae (Korea)

3. Causal relationship between supply chain dynamic capabilities, technology innovation, and operational performance
   Ki-Jung Ju, Byeonghwa Park, Taikyoo Kim (Korea)

4. The impact of preliminary elements for management innovation adoption on the firm’s profitability
   Uk Jung, Chang-Hwa Baek, Shin-Won Seo, Sung-Uk Lim (Korea)
### 13<sup>th</sup> October 2015, Tuesday

#### 09:00~10:30  **PARALLEL SESSION 3, Quality Management System 1**

**SESSION CHAIRS:** Chi-Kuang Chen (Yuan Ze University, Taiwan)

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#### 09:00~10:30  **PARALLEL SESSIONS 3, Organization Culture, Learning, Innovation 1**

**SESSION CHAIRS:** Sangbok Ree (Seokyeong University, Korea)

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09:00~10:30  PARALLEL SESSION 3, PROCESS DESIGN AND IMPROVEMENT 3

SESSION CHAIRS: Uk Jung (Dongguk University, Korea)

1. **A new multidimensional design space identification method for a quality oriented drug development process**
   Gyuhyo Choi, Tuan-Ho Le, Sangmun Shin (Korea)

2. **Modeling continuous improvement evolution in the service sector: A comparative case study**
   Christopher D. Milner, Barbara M. Savage (UK)

3. **In search of “Muda” through TKJ Diagram. An analysis and Classification**
   Manuel F. Suárez-Barraza, Francisco G. Rodríguez-González (Mexico)

4. **Maturity of the procurement process in small and medium-size enterprises: A benchmarking of hospitals and metal-mechanic companies**
   Gérson Tontini, Luciano Castro de Carvalho, Nair Fernandes da Costa Schlindwein, Victor Tomarevski (Brazil)

14:00~15:30  PARALLEL SESSION 4, QUALITY IN HIGHER EDUCATION 1

SESSION CHAIRS: Bo Bergman Chalmers (University of Techno, Sweden)

1. **Organizational Change as Student Project**
   Anette Oxenswärdh, Maria Fredriksson (Sweden)

2. **Applying Public Data on Students’ Socio-economic Status for establishing and assuring the quality and equity of education**
   Bren Matevž, Čebulj Nace, CankarGašper, Zupanc Darko (Slovenia)

3. **Design and Implementation of University Internal Study Quality Management System**
   Egle Katiliute, Asta Daunoriene (Lithuania)

4. **ACODE Benchmarks for Technology Enhanced Learning (TEL): Findings from a 24 university benchmarking exercise regarding the benchmarks’ fitness for purpose and capacity to generate useful quality assurance information**
   Michael Sankey, Fernando Padró (Australia)
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14:00~15:30 PARALLEL SESSION 4, Service Quality

SESSION CHAIRS: Youn Sung Kim (Inha University, Korea)

1. Study on efficient operation of coffee franchises in Korea and the improvement using the analysis of importance – satisfaction: focusing DEA, AHP and IPA
Changhee Kim, Sanghoon Lee, Soowook Kim (Korea)

2. Integration of SERVQUAL and QFD for University’s Canteen Service Improvement
Nut Thirathammanukul, Natcha Thawesaengskulthai (Thailand)

3. Study on key factors of logistics services in B2C E-commerce in China
Yang Zhang, Yue Wu, Haijing Liu, Qing Wang (China)

4. Design of a Scale for Measuring Quality of Mobile Location-Based Services: Focused on Map Services
Jun-Yeon Heo, Kwang-Jae Kim (Korea)

14:00~15:30 PARALLEL SESSIONS 4, Quality Management System 2

SESSION CHAIRS: Gérson Tontini (University of Blumenau – FURB, Brazil)

Chi-Kuang Chen, Karina Anchecta (Taiwan)

2. Total Quality Management in local authorities. Evidence from Greece
Evangelos Psomas, Mary Tasiou, Fotis Vouzas (Greece)

Felix Meentken, Roland Jochem, Simon Hagemann (Germany)

4. Bringing Kano’s perspective to AHP: The 2D-AHP decision model
Uk Jung, Sung-Min Yim, Sung-Uk Lim, Chong-Man Kim (Korea)
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**SESSION CHAIRS:** Sverker Alänge (Chalmers University of Technology, Sweden)

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**SESSION CHAIRS:** Geoff Vining (Virginia Tech, USA)

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SESSION CHAIRS: Aldona Glinska-Newes (Nicolaus Copernicus University, Poland)

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Laura Di Pietro, Bo Edvardsson, Roberta Guglielmetti Mugion, Maria Francesca Renzi, Martina Toni (Italy)

2. Quality is to a product what character is to a man - is virtue ethics the missing piece in quality management?
Mia Ljungblom, Thomas Taro Lennerfors (Sweden)

3. A Conceptual Model of System Informatics-based Service
Chang-Ho Lee, Jun-Yeon Heo, Che-Hyeon Lim, Kwang-Jae Kim (Korea)

4. A Measurement and Analysis Model on Green House Gas Management-A Triple Cause-Effect Logic
Chi-Kuang Chen, Madi Kambai (Taiwan)

16:00~17:30  PARALLEL SESSION 5, Quality Management System 3
SESSION CHAIRS: Muhammad Asif (Prince Sultan University, Saudi Arabia)

1. A systemic assessment of QA-based food safety management system of Chinese edible oil manufacture in view of context characteristics
Yingxue Ren, Zhen He, Pietermei A. Luning (China)

2. Video tutorials for QM tools as an instrument for resource-efficient knowledge transfer while maintaining the quality of the results
Jane Worlitz, Stefan Peplowsky, Anne Stabler, Ralf Woll (Germany)

3. Application of Korean Standard Quality Excellence Index for Strategic Quality Improvement Planning in Korea
Sangwook Park, Nina Shin, Soongeun Lee (Korea)

4. Quality Control of 3D Printed Parts in Selective Laser Melting Process
Il Hyuk Ahn, Seung Ki Moon, Jung Sang Yoo, Hyung Sool Oh (Korea)
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**SESSION CHAIRS:** Walter Tucker (Eastern Michigan University, USA)

1. **Homo experiens – exploring the use of factorial experiments in quality-of-life improvement**
   Marco A. F. R. N. Santos, Henrik Eriksson (Sweden)

2. **Technostress from mobile communication and its impact on quality of life and productivity**
   Sae Bom Lee, Sang Chul Lee, Yung Ho Suh (Korea)

3. **A Study on the Quality of Life Improvement in Fixed IoT Environments**
   Eul-Hee Roh, Sang-Chan Park, Yoon-Seok Chang (Korea)

4. **Economic Statistical Design of Variable Sampling Interval X Control Chart Based on Surrogate Variable using Genetic Algorithms**
   Tae-Hoon Lee, Sung-Hoon Hong, Hyuck-Moo Kwon, Min-Koo Lee (Korea)

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**SESSION CHAIRS:** Manuel F. Suárez Barraza (Universidad de las Américas Puebla, México)

1. **Statistical Engineering and Tearing Down Disciplinary Area Silos in Quality Engineering**
   Geoff Vining (USA)

2. **Study for improving the capability of one-class classification**
   Jin Young Choi, In Kyo Jeong (Korea)

3. **Monitoring the Data Quality of Multinational Manufacturing Firms**
   Bo Kyeong Lee, Danjing Li, Hyesin Choi, In Seok Heo, So Young Sohn (Korea)

4. **Bayesian regression for virtual metrology of mobile repeater systems**
   Sung-Do Kim, Jong-So Kim, Byeong-Min Mun, Suk-Joo, Bae (Korea)
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