

**Proceedings of the 4th International
QMOD Conference**
Quality Management and Organisational Development



Su Mi Dahlgaard Park & Jens J. Dahlgaard (eds.)



LINKÖPINGS UNIVERSITET
12-14 September, 2001, Sweden

CONFERENCE CHAIR:

Dr. Jens J. Dahlgaard, Linköping, Sweden

ORGANIZING COMMITTEE:

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Dr. Jan Axelsson

Simon Schütte

COOPERATING ORGANIZATIONS:

- **EOQ** - European Organization for Quality
- **EFQM** - European Foundation for Quality Management,
- **SIQ** – Swedish Institute for Quality
- **VI** – Swedish Manufacturing Industries
- **ESS** - Ergonomics Society of Sweden
- **SFK** - Swedish Association for Quality

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Prof. Kjell Ohlsson, Sweden

Prof. Lennart Sandholm, Sweden

TIMETABLE

Wednesday, September 12, 2001

08.30 - 17.30	Pre-conference seminars 1-5
19.00 - 21.00	Welcome reception at Stadshuset (City Hall), Linköping

Thursday, September 13, 2001

08.00-10.00	Registration				
10.00-10.30	Conference Opening				
10.30-12.00	Keynote Lectures				
12.00-13.30	Lunch				
13.30-15.00	Parallel Sessions 1	1A	1B	1C	1D
15.00-15.30	Coffee Break				
15.30-17.00	Parallel Sessions 2	2A	2B	2C	2D
19.00-24.00	Conference Dinner at Kårallen, Linköping University				

Friday, September 14, 2001

09.00-10.30	Parallel Sessions 3	3A	3B	3C	3D
10.30-11.00	Coffee Break				
11.00-12.00	Plenary Lectures				
12.00-13.30	Lunch				
13.30-15.00	Parallel Sessions 2	2A	2B	2C	2D
15.00-15.30	Coffee Break				
15.30-16.30	Special Silver Jubilee Lectures				
16.30-17.00	Announcement of next QMOD Conference				
17.00	Close of Conference				

Wednesday, September 12

Pre-Conference seminars

08.30-12.00 Seminar 1:

Noriaki Kano on **Attractive Quality Creation**. Understand your products' attributes. *A must be seminar* for product development

08.30-12.00 Seminar 2:

Yoshio Kondo on **Leadership and Human Motivation** for continuous improvements and innovation. *A must be seminar* for understanding people's needs and commitment.

13.00-17.30 Seminar 3:

Mitsuo Nagamachi on **building emotions into your products**. Understand your customers' emotional attributes. *A must be seminar* for product development.

13.30-17.00 Seminar 4:

Tito Conti on **assessing and diagnosing organizational excellence**. Understand your Organisation's strategic opportunities for improvements. *A must be seminar* for organizational development.

09.30-16.00 Seminar 5:

Jens J. Dahlgaard, Dave Antis, Sören Bisgaard and Bo Bergman on **Six Sigma Quality**. Understand the principles and tools for creating six sigma quality. *A must be seminar* on how to identify and release "the gold in the mine" – the Costs of Poor Quality (wastage of any kind).

1. Professor Yoshio Kondo, Kyoto University, Japan: President and Academician of International Academy of Quality. A world authority for his contributions to the theories for Quality Motivation/Human Quality Control and Standardisation and Creativity.

2. Professor Noriaki Kano, Tokyo Science University, Japan: Academician of International Academy of Quality, president for Japan Society for Quality, "father" to the theory of Attractive Quality Creation.

3. Dr. Tito Conti, Italy: Vice president and Academician of International Academy of Quality, former president of European Organisation for Quality. One of the leading brains behind the European Excellence Model.

4. Professor Mitsuo Nagamachi, Hiroshima International University, Japan: The founding authority of the new methodology Kansei Engineering, which is a group of methods to build customers' emotions into new products.

5. Professor Sören Bisgaard, USA: Sören Bisgaard has been a professor at University of Michigan, Madison, and St. Gallen, Switzerland. He is recognised as one of the world's experts on Quality Engineering, and he is for the moment consulting on six sigma quality at SBTI, the leading six sigma consultancy company in USA.

6. Professor Jens J. Dahlgaard, Linköping University, Sweden: Academician of International Academy of Quality. One of the founders of the Danish Quality Award, and chairman of the Jury 1993-2000. Author of several books and more than 100 international articles on quality management,

7. Professor Bo Bergman, Chalmers Technical University, Göteborg, Sweden: Academician of International Academy of Quality. One of the Swedish international experts on Quality Technology. Author and Co-author of several books on quality technology and six sigma quality.

8. Dr. Dave Antis, SBTI, USA: Dave Antis is Vice President of SBTI, the leading six sigma consultancy company in USA. He has been with SBTI since the company was founded, and has a lot of experiences to share with the participants of this seminar.

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Wednesday, 12 September

19.00 – 21.00:

Welcome Reception hosted by the mayor of Linköping Eva Joelsson at Stadshuset (the city hall) in Linköping

Thursday, 13 September

08.00 – 10.00: Registration

10.00 – 10.30: Opening of the Conference

Jens J. Dahlgaard, Professor, Conference Chair

Johnny Lindström, Professor, President of SIQ (Swedish Institute of Quality)

Bertil Andersson, Professor, Rector of Linköping University

10.30 – 12.00: Keynote Lectures

Chairman: Jens J. Dahlgaard

1. Prof. Noriaki Kano (Japan): *Historical change of Quality as competitive advantage and life cycle of attractive quality through must-be quality*
2. Dr. Tito Conti (Italy): *Human and Social Implications of Excellence Models: are they really accepted (or even grasped) by the business community?*

12.00 – 13.30: Lunch

13.30 – 15.00: Parallel Sessions 1

Session 1 A Chairmen: Yoshio Kondo, Japan & Ton Van der Wiele, Netherlands

The Disney way of management

1. Paul Grossman (US): *The Disney Approach to Leadership*
2. Frits van den Assem & Martijn Hesselink (Netherlands): *Start, the implementation of a 'Service Excellence Program'*
3. Van der Wiele (Netherlands): *The link between customer satisfaction and business performances*

Session 1 B – Chairman: Kjell Ohlsson, Sweden

People and Organisational Development

1. Anne Martensen & Lars Grönholdt (Denmark): *A holistic view of employee loyalty: Determinants and impact on company value*
2. Yasemin Claire Erensal & Esra Albayrak (Turkey): *Application of Analytic Hierarchy Process Methodology in Human Performance Improvement and Management*
3. Kristina Palm & Sofia Sandgren (Sweden): *Teamwork through Teambuilding*
4. Müjde Erol & Yasemin Claire Erensal (Turkey): *Using Performance Technology to Create A Flexible Organization Focused on Customer Value*

Session 1 C – Chairman: Håkan Wiklund, Sweden

Excellence in Education and Academics

1. Sergey Stepanov & Mrs. Tatiana Kolesnikova (Russia): *Customer Satisfaction as a Basis Factor for Higher Institution Success*
2. Maria Cristina Mendonca & Amilcar Goncalves (Portugal): *Quality Improvement in University Continuing Education: The quality characteristic – competence of the teacher*
3. Su Mi Park Dahlgaard (Sweden): *Understanding Education and Learning - a prerequisite for Improving Educational Institutions*
4. Sverker Alänge & Stefan Book (Sweden): *Process Analysis in an Academic Environment*

Session 1 D – Chairman: Lennart Sandholm, Sweden

Six Sigma Quality Programmes

1. Xavier Tort-Martorell (Spain): *Six Sigma, Lessons and Questions from a South European Perspective*
2. Hans Bajaria (US): *Six Sigma Quality – Popular Notion versus Strategic Notion*
3. Lars Sörqvist (Sweden): *Six Sigma - the Swedish Way*

15.00 – 15.30: Coffee Break

15.30 – 17.00: Parallel Sessions 2

Session 2 A – Chairman: Lars Lindkvist, Sweden

Learning and Project Management

1. Pekka Järvinen & Tommi Virtanen (Finland): *The Special Requirements of Cause and Effect Analysis in a Non-Routine Environment*
2. Kenji Tanaka (Japan): *Management Learning for Prevention of Organizational Accidents*
3. Russell L. Johnson & James E. Folkestad (US): *Critical Chain: A Quality assurance approach to project management*
4. Marc Antoni & Andrew Sense (Sweden & Australia): *Learning within and across projects – a comparison of frames*

Session 2 B – Chairman: Sverker Alänge, Sweden

Quality and Organisational Excellence in Public Service

1. Maria Cristina Mendonca & Amilcar Goncalves (Portugal): *Quality Improvement in Public Management: A Model for Quality Implementation in Municipalities*
2. H.A. Crostack & M. Höfling (Germany): *Increasing the Customer Focus of Research Institutes on the Basis of the EFQM Excellence Model*
3. Raine Isaksson & Håkan Wiklund (Sweden): *Measuring Quality With a Process Model*
4. Michele Cano, Siobhan Drummond and Ann Lockhart (UK): *The effect of Continuing Professional Development on Quality Management within Healthcare Professions*

Session 2 C – Chairman: Xavier Tort-Martorell, Spain

Excellence in Education and Academics

1. Zvi E. Josman (Israel): *Enhancing Educational Excellence By Innovation: An Evaluation of a National School-Based Experimental*
2. B.C.J. Labuschagne, D.F. du Toit (South Africa) & P.V.J.M. Hoogland (Netherlands): *The Learning Environment at Medical Schools*
3. Håkan Wiklund (Sweden): *A Swedish Perspective on Total Quality Management in Higher Education*
4. S. Mark Comstock, David M. Smith and Beverly A. Block (US): *The Academic Portfolio as a Balanced Scorecard*

Session 2 D – Chairman: Johnny Lindström, Sweden

ISO 9000

1. Ingo Janas (Germany): *Explorative study of the expected consequences for existing Quality Management Systems due to the Revision of the ISO 9001 in certified companies in Germany*
2. D. Bénézech, G. Lambert, B. Lanoux, C. Lerch & J. Loos-Baroin (France): *Completion of knowledge codification: An empirical analysis of ISO Standards Implementation*
3. Shu Yamada (Japan): *Expenses estimation for ISO 9000 certification by a questionnaire survey in Japanese manufacturing companies*
4. B. Poksinska, J.J. Dahlgaard & M. Antoni (Sweden): *The State of ISO 9000 Certification – a Study of Swedish Companies*

19.00: Conference dinner at Kårallen, Linköping University

Friday, 14 September

09.00 – 10.30: Parallel Sessions 3

Session 3 A – Chairman: B. Labouschagne, S. Africa

Strategy and Policy

1. Gülsin Büyüközkan & Esra Albayrak (Turkey): *Decision Analysis in Uncertainty*
2. Marko Kiauta (Slovenia): *Network For Managing an Organisation Built on QM System*
3. Federico Brunetti (Italy): *Gazing into the crystal ball: Considerations on the future of the firm*
4. Ales Nemeč (Slovenia): *The Essentials of Excellence and Managerial Tools*

Session 3 B – Chairman: Tito Conti, Italy

Excellence in the Postal Sector

1. J. J. Dahlgaard & Lars Nilsson (Sweden): *Self-Assessment Using a Survey Approach: Benchmarking Performance and Identifying Improvement Areas*
2. J.J. Dahlgaard & Lars Nilsson (Sweden): *Self-Assessment Using a Survey Approach: The Role of Importance Weights*
3. Perter Myrhøj Nielsen (Denmark): *The Journey towards Excellence – Post Denmark*

Session 3 C – Chairman: Pekka Järvinen, Finland

Learning and Knowledge Management

1. Lars Lindkvist, Jonas Söderlund & Cecilia Frohm (Sweden): *Beyond Knowledge management – strategies for connecting people in collectivities*
2. Gülcin Büyükoçkan (Turkey): *A Methodological Approach to Define Organizational Knowledge*
3. Henning Bech (Denmark): *Managing Information Overload – causes, factors and strategies*
4. Lars Bengtsson & Mandar Dabhilakar (Sweden): *Balanced Scorecard and Production Teams – Effects on Control, Continuous Improvements and Learning*

Session 3 D – Chairman: Takenori Takahashi & Shu Yamada, Japan

Benchmarking, Measurements, Consumer Behaviours and Outdoor Type Manufacturing

1. H.A. Crostack & Mr. F. Schneider (Germany): *Quality-related Process Benchmarking in Order Processing*
2. M. Zhao, M. Dabhilakar, & L. Bengtsson (Sweden): *Multivariate analysis methods for organizational performance data*
3. Takenori Takahashi & Masahiro Imai (Japan): *Outdoor-type Manufacturing*

10.30 – 11.00: Coffee Break

11.00 – 12.00: Plenary Lectures chairman: Bo Hellgren, Sweden

1. **Prof. Yoshio Kondo** (Japan): *Keeping “Dream” in Mind - Indispensable Conditions for Successful Leadership in Participative Society*
2. **Prof. Mitsuo Nagamachi** (Japan): *TQM and Kansei Engineering / Kansei Ergonomics*

12.00 - 13.30: Lunch

13.30 – 15.00: Parallel Sessions 4

Session 4 A – Chairman: Ales Nemec, Slovenia

New Organisational Structures

1. L. Moestam Ahlström & Ann Kjellberg (Sweden): *An Approach to Sustainable Progress in Organisations*
2. Lars Bengtsson (Sweden): *Outsourcing manufacturing – Analysis of a Learning Dilemma*
3. Maqsood A. Sandhu (Finland): *Business Process Re-engineering for the construction of Turn-key Power Plant Projects*
4. Aleksandra E. Jasiak & Grzegorz Dahlke (Poland): *Enterprise Restructuring in Poland and its Impact on Working Conditions*

Session 4 B – Chairman: Bo Bergman, Sweden

Reflections on Current TQM Paradigms, Total Productive Maintenance

1. Olavur Christiansen (Faroe Islands): *TQM and economic, sociological and organisational theory building Quality Improvement (1) and (2)*
2. Ann Kjellberg & Prof. Gunnar Sohlenius (Sweden): *Principles and experiences concerning sustainability in product realisation*
3. Liselott Lycke (Sweden) & Alex Douglas (UK): *Implementing Total Productive Maintenance*

Session 4 C – Chairman: Bo Hellgren, Sweden

Innovation and New Product Development

1. Per Sundström & H. Anderson (Sweden): *The Balance Between Creativity and Stability Within Product Development Organisations*
2. Karina Flores & Nicolás Hendrichs (México): *Does quality hinder innovation?*
3. Ingrid Hallander (Sweden): *Organizational effects on Innovation capability*
4. Peter Kammerlind & Simon Schütte (Sweden): *Integrating Kansei Engineering in Product Development*

Session 4 D – Chairman: M. Nagamachi, Japan & J. Eklund, Sweden

Kansei Engineering

1. Mitsuo Nagamachi (Japan): *Implication of Kansei Engineering and Kansei evaluation of form ratio*
2. Shigekazu Ishihara, Keiko Ishihara, Mitsuo Nagamachi & Tatsuo Nishino (Japan): *Mathematical modeling of non-linearity on form ratio Kansei evaluation data*
3. Tatsuo Nishino, Mitsuo Nagamachi & Shigekazu Ishihara: *Rough Set Analysis on Kansei Evaluation of Color and Kansei Structure*
4. Karin Rydman, Jesper Sandin, Jörgen Eklund, Shigekazu Ishihara & Mitsuo Nagamachi (Sweden and Japan): *User feelings for push buttons – Kansei Engineering*

15.30 – 16.30: Special Silver Jubilee Lectures

Chairman: Jens J. Dahlgaard, Sweden

1. **Prof. Lennart Sandholm** (Sweden): *Do we need a Quality Manager?*
2. **Prof. Bo Bergman** (Sweden): *On the System of Profound Knowledge*

16.30 - 17.00: Announcement of next QMOD Conference

Conference Org. Chair: Su Mi Dahlgaard Park

17.00: Close of Conference