

The 2000 MIT Conference on Information Quality

Conference Program

October 20, Friday

5:00 - 7:00 **Registration and Reception at MIT Faculty Club.....E52 (6th Floor)**
Informal Discussions

October 21, Saturday

8:00 - 9:00 **Registration and Continental Breakfast.....E51-345**

9:00 - 9:30 **Chairs' Welcome and Opening Remarks.....E51-345**
Yang W. Lee, Conference Co-Chair, Northeastern University
Stuart E. Madnick, Conference Co-Chair, MIT Sloan School of Management
Barbara D. Klein, Program Co-Chair, University of Michigan-Dearborn
Donald F. Rossin, Program Co-Chair, University of Michigan-Dearborn

9:30 - 10:20 **Keynote Speech.....E51-345**

RES IPSA LOQUITUR

Keynote speaker: Eric Lieberman, President, Firstlogic

10:20 - 10:45 **Coffee Break**

10:45 - 12:15 **Parallel Paper Session 1A: Developing Information Product MapsE51-372**

Session Chair: James Funk, S. C. Johnson & Univ. of Wisconsin-Parkside

IP-MAP: Representing the Manufacture of an Information Product.....1
(Research Paper)

G. Shankaranarayanan, Boston University

Richard Y. Wang, Boston University

Mostapha Ziad, Suffolk University

Developing a Data Production Map to Identify Data Quality Problems
(Practice-Oriented Paper)

Bruce Davidson, Cedars Sinai Medical Center

Alein Chun, Cedars Sinai Medical Center

**Developing Data Product Maps for Total Data Quality Management:
The Case of Georgia Vital Records.....17**

(Practice-Oriented Paper)

Frank H. Millard, Georgia Public Health Division

Mike Lavoie, Georgia State Registrar

10:45 - 12:15 **Parallel Paper Session 1B: Case Studies on Information Quality**E51-335

Session Chair: Diane Strong, Worcester Polytechnic Institute

How to Get an Information Quality Program Started: The Ingenix Approach.....28

(Practice-Oriented Paper)

Beverly K. Kahn, Suffolk University

Raissa Katz-Haas, Ingenix

Diane M. Strong, Worcester Polytechnic Institute

The Drive to High IQ in British Telecommunications plc (BT): Deploying Information Quality Tools in a Federated Business..... 36

(Practice-Oriented Paper)

Nigel H. Turner, British Telecommunications plc

John C. Hodges, British Telecommunications plc

Improving Information Quality in Loan Approval Processes for Fair Lending and Fair Pricing.....45

(Research Paper)

M. Cary Collins, University of Tennessee

Frank M. Guess, University of Tennessee

12:15 - 1:15 **Lunch**

1:30 - 3:00 **Parallel Paper Session 2A: Record Matching and Data Source Selection**..E51-372

Session Chair: Giri Kumar Tayi, State University of New York at Albany

On the Accuracy and Completeness of the Record Matching Process.....54

(Research Paper)

V.S. Verykios, Drexel University

M.G. Elfeky & A.K. Elmagarmid, Purdue University

M. Cochinwala & S. Dalal, Telcordia Technologies

Assigning a Quality Measurement to Matching Records from Heterogeneous Legacy Databases: A Practical Experience.....70

(Practice-Oriented Paper)

L. Robert Pokorny, XSB, Inc.

(CANCELLED) Fuzzy Algorithm for Selection of Reliable Information from a Collection of Different Data Sources.....76

(Research Paper)

Jing Yu, University of Arkansas

David Wessels, University of Arkansas

Yong-qing Li, East Carolina University

1:30 - 3:00 Parallel Paper Session 2B: Measurement of Information QualityE51-335

Session Chair: Leo Pipino, University of Massachusetts, Lowell

Conceptualizing Information Quality: A Review of Information Quality Frameworks from the Last Ten Years.....83

(Research in Progress)

Martin J. Eppler, Media and Communications Management Institute,
Switzerland

Dörte Wittig, Media and Communications Management Institute,
Switzerland

The Assessment of Website Quality.....97

(Research in Progress)

David Kopcsó, Babson College

Leo Pipino, University of Massachusetts, Lowell

William Rybolt, Babson College

An Approach for Data Quality Measurement in Data Warehousing.....109

(Research in Progress)

Markus Helfert, University of St. Gallen, Switzerland

Renate Radon, Epicur GmbH, Germany

A Conceptual Framework for Developing Quality Measures for Information Systems.....126

(Research in Progress)

A. Dedeke, Lee University

3:00 - 3:30 Coffee Break

3:30 - 5:00 Parallel Paper Session 3A: Assessing Information QualityE51-372

Session Chair: Burton Cutting, Merrill Lynch

Using Time Series to Assess Data Quality in Telecommunications Data Warehouses.....129

(Practice-Oriented Paper)

Renato Busatto, Mobilix Telecommunications, Denmark

Quality Evaluation of Electronic Communication Fora with evalYOUate.....137

(Research Paper)

Marc Rittberger, University of Konstanz

Assessment Methods for Information Quality Criteria.....148
(Research Paper)

Felix Naumann, Humboldt-Universität zu Berlin, Germany
Claudia Rolker, Forschungszentrum Informatik (FZI), Germany

3:30 - 5:00 **Parallel Paper Session 3B: Information Quality and Decision Support ...E51-335**

Session Chair: Shobha Chengalur-Smith, State University of New York at Albany

Measuring Information Continuity in Evolving Decision Support Systems.....163

(Research Paper)

Adjo Amekudzi, Georgia Institute of Technology
Olayele Adelakun, DePaul University

The Quality of Temporal Information.....173

(Practice-Oriented Paper)

Eric Hughes, The MITRE Corporation

Can Information Engineering Enhance Information Quality for Effective Decision-Making in Textiles?.....179

(Research Paper)

Yatin Karpe, North Carolina State University
Neil Cahill, Institute of Textile Technology
George Hodge, North Carolina State University
William Oxenham, North Carolina State University

October 22, Sunday

8:00 - 9:00 **Registration and Continental Breakfast..... E51-345**

9:00 - 10:30 **Parallel Paper Session 4A: Improving Information Quality.....E51-372**

Session Chair: Tamraparni Dasu, AT&T Labs - Research

Hunting Down Glitches in Massive Time Series Data.....190

(Research Paper)

Tamraparni Dasu, AT&T Labs - Research
Theodore Johnson, AT&T Labs - Research
Eleftherios Koutsofios, AT&T Labs - Research

Data Cleansing: Beyond Integrity Analysis.....200

(Research Paper)

Jonathan I. Maletic, The University of Memphis
Andrian Marcus, The University of Memphis

Data Certification.....210

(Research in Progress)

Ion Ivan, Academy of Economic Studies, Bucharest
Paul Pocatilu, Academy of Economic Studies, Bucharest
Teodor Mihai, Storm Technology Ltd, Galway, Ireland
Costel Stanca, Constantza Maritime University

(CANCELLED) The Interactions Between Improving Access to Data and Improving Processes: A Case in State

Government.....213

(Research in Progress)

Bruce Kissinger, Orion Internet Systems Group
S. Thomas Foster, Jr., Penn State University

9:00 - 10:30 **Parallel Paper Session 4B: Information Quality Management.....E51-335**

Session Chair: Elizabeth Pierce, Indiana University of Pennsylvania

The Quality of Online Registration Information.....215

(Research Paper)

Andreas Neus, IBM, Germany

(CANCELLED) A Sociological Framework for Information Quality in Virtual Knowledge

Communities.....228

(Research Paper)

Daniel Diemers, Research Institute for Sociology, Switzerland

Has Quality Management Any Effect on Quality? - Analysis of Quality Management by a Non-linear Model.....242

(Research Paper)

Joachim H. Kreutzberg, University of Zurich, Switzerland

10:30–11:00 **Coffee Break**

11:00-12:30 **Parallel Paper Session 5A: Data Warehousing and Data Mining.....E51-372**

Session Chair: G. Shankaranarayanan (Shankar), Boston University

The Enterprise Data Warehouse - From Data to Decision Making.....258

(Research Paper)

Richard McCarthy, Central Connecticut State University
George Claffey, Central Connecticut State University

Ensuring Data Quality for Data Mining - A Case Study.....264

(Practice-Oriented Paper)

Varun Madhok, IBM Canada Ltd.

Generalizing Association Rules to Ordinal Rules.....268

(Research Paper)

Sylvie Guillaume, Ecole Polytechnique de l'université de Nantes
Ali Khenchaf, Ecole Polytechnique de l'université de Nantes

11:00-12:30 **Parallel Paper Session 5B: Electronic Commerce and Networking.....E51-335**

Session Chair Raïssa Katz-Haas, Ingenix

Quality and Process Standards for Electronic Commerce.....283

(Research Paper)

Joseph Sarkis and R.P. Sundarraj, Clark University

Information Quality, the Information Infrastructure, and Emergent E-Commerce in Russia 2000.....299

(Research Paper)

Elia Chepaitis, Fairfield University

Managing Networks Containing Dumb Devices with Intelligent Agents.....308

(Research Paper)

David Kenneth Barnes, Nova Southeastern University

A Soft System Perspective on Information Quality (IQ) in Electronic Commerce318

(Research in Progress)

Mohamed G. Aboelmaged, Lancaster University Management School

12:30 **End of IQ-2000 Conference**