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## **Editorial**

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## **1 Introduction**

Welcome to second edition of the inaugural issue of IJIQ. This edition comprises seven papers. These papers have been organised as follows; the first three papers feature new data/Information Quality (IQ) tools. The next two papers present the results of empirical works. The sixth paper deals with the implementation of a data quality project and the final paper of this edition is a theoretical paper, which is in line with the Journal's ongoing commitment to publishing theoretical works.

## **2 Data/Information Quality (IQ) tools**

Networks based on Internet Protocol (IP networks) generate a large amount of technical, sometimes arcane data, making monitoring and analysis by administrators a tough problem that requires substantial technical knowledge. The first paper of this issue, 'Information quality for network monitoring and analysis' by Jon Wright, James A. Pelletier, Tamraparni Dasu and Gregg T. Vesonder of AT and T Lab-Research (USA) presents a collection system, named '*Amber*', to address the quality issues encountered in the data needed to support management of IP networks. The experiences in implementing *Amber* illustrate the importance of paying attention to and understanding the underlying data-generating processes.

The second paper, 'A Swiss army knife approach to DQ assessments' by V. Cotik, P. Luján, D. Scotton and D. Yankelevich, presents a data quality toolkit, named DQT, developed by the authors that provides a systematic way of assessing data quality. The authors claim that the use of the toolkit obtains better and faster results in data quality diagnosis projects. The authors present the outcomes of actual projects developed for clients in different vertical markets in order to show the applicability of their toolkit.

The innovation management process becomes so critically dependent on information that IQ problems must be identified and treated as urgently as possible. The third paper, 'Information quality factors affecting innovation process' by Latif Al-Hakim employs a new IQ tool referred to as Information Function Deployment (IFD) procedure to identify IQ factors (IQ dimensions and IQ measures) affecting the innovation management process in an organisation. The organisation is a high technology firm dealing with the design and manufacture of electronic equipment and tools used for medical testing. The identified IQ dimensions are timeliness, interpretability, coherency

and completeness. The IQ measures are information sensing, information collecting, information processing, information organising, information integrity and information sharing.

### **3 Empirical work**

The fourth paper, 'Detection and correction of data errors in the practice of actuarial pension consulting' by Barbara D. Klein of University of Michigan-Dearborn presents a methodology comprising semi-structured interviews to examine user's detection of data errors in the practice of pension consulting by actuaries. Results presented in this paper demonstrate that consulting actuaries are effective detectors of data errors and that their detection behaviour is affected by incentives to detect data errors, the materiality of data errors, and the ease with which data errors can be corrected once detected.

The fifth paper, 'An empirical research on non-technical factors related to statistical data quality in China's enterprises' by Zhenguo Yu and Ying Wang, presents the results of empirical research conducted on 152 Chinese enterprises. The research emphasis is on the non-technical data quality factors. The paper chose seven non-technical factors as explanatory variables, three dimensions of data quality as dependent variables and one control variable to construct a conceptual model for Chinese enterprises. The results indicate that the main factors affecting the data quality are the awareness of higher-level managers, the status of statistical personnel, normalisation of enterprise, knowledge of statistical personnel, the strength of statistical department and enterprise computerisation.

### **4 Data quality project**

When information is transferred between organisations, its quality should be carefully considered. The sixth paper of this issue, 'Transferring information between information systems' authored by Raija Halonen considers this important aspect of data quality. It reports the difficulties in implementing the project. The paper emphasises that the information systems project did not follow any strict development theory. Despite that, the output was perceived as excellent by the users. Instead of technical approach, the project concentrates on the quality of the information that is to be transferred between information systems.

### **5 Theoretical work**

The last paper of this issue 'A formal definition of operation quality of factors: a focus on data and information' by Zbigniew J. Gackowski presents a formal definition of the operation quality of factors that play a significant role in operations. The focus is on factors of symbolic nature, such as data, information and rules of reasoning and proceeding. The definition includes a philosophical perspective of quality, communications, decision making, implementing and acting, which are always affected by explicit or implicit purposes. Purpose and circumstances pervade all aspects of quality assessment. The emphasis is on routine operations and assessment of quality from the operations-management perspective.

**Acknowledgement**

In concluding this editorial, I would like to take the opportunity to extend warm words of gratitude to all reviewers and colleagues at the Inderscience Publishers for their time and effort during the development process of this issue.