
Editorial

Jon R. Wright and Gregg T. Vesonder

AT&T Labs – Research,
180 Park Avenue,
Florham Park, 07932 NJ, USA
E-mail: jrw@research.att.com
E-mail: gtv@research.att.com

Biographical notes: Jon R. Wright received his PhD from Rice University in 1978, and joined Bell Laboratories shortly afterwards. At Bell Labs, he worked on a number of problems, many of which would today be described as information mining and information quality. He received the Distinguished Member of Technical Staff award in 1985. In 1996, he became a member of AT&T Labs-Research where he is currently focusing on data mining and data quality problems, and is especially interested in applying methods and technology from other disciplines such as Artificial Intelligence.

Gregg T. Vesonder is the Executive Director of the Communication Software Research Department at AT&T Labs-Research. He is also Adjust Professor of Computer and Information Science at the University of Pennsylvania and at the Stevens Institute of Technology. He has developed and managed software systems supporting operations, e-commerce, sales support, and data mining. He has been involved in software tool development for speech recognition, C++ compilers, artificial intelligence and software design and analysis. He is both a Bell Labs and an AT&T fellow. He received his BA in Psychology from the University of Notre Dame and a MS and PhD in Cognitive Psychology from the University of Pittsburgh.

For many applications, data originate within business processes that involve both humans and automated, computerised components. Usability enters into the picture in several ways. Obviously, any time a person enters data into a system, the usability of the system's human interface comes into play. But it has long been our contention that usability issues extend well beyond the computer interface. Business processes are often implemented through standardised rules and procedures that are executed by people. Those rules and procedures can be complex and difficult or they can be simple and easy to understand, as well as various shades in between. Good data are the result of good user interfaces, but also of clean, standardised procedures.

The first paper in our special issue, 'The national ambulatory care reporting system: factors that affect the quality of its emergency data' by Gibson, Richards and Chapman, provides some empirical evidence of these factors at work in the health care domain. Their concern is with the quality of a database of information that is used to analyse and understand emergency health care in Canada. The database is used for health care policy development, planning, and evaluation.

The data are derived from patient records that are, in part, hand-written. Dedicated hospital staff 'code' or abstract the written records using a standard classification system. The researchers used a reabstraction methodology to determine the consistency and accuracy of the coding process. The study used a questionnaire to shed light on the various factors that affected coding accuracy.

The second paper in our special issue, 'Defining a framework for the evaluation of information' by Darlington, Culley, Zhao, Austin and Tang, is based on two insights that have wide ranging importance. The first is that, in nearly all enterprises, information has a natural life cycle. Among other things, information is created, distributed, used, and archived. The second is that modern computer technology has made an overwhelming amount of information available to organisational decision makers. This phenomenon is sometimes known as information overload. Taken together, the two points suggest that automation or partial automation of the information life cycle may be required for efficiency and economy. Darlington and his co-authors are working with engineering documentation to establish a framework for information quality evaluation that could lead to automation or partial automation of the life cycle.

Next, Corradini, Polzonetti, Re and Tesei in 'Quality of service in e-government underlines the role of information usability' explore how information quality impacts usability in e-government services. They do this within the context of a formal assessment model that is presented in their paper. One interesting aspect of the assessment model is that it takes into account some forms of interaction between parameters. They report a study that demonstrates how their model can be used in practice and that demonstrates the importance that information quality has for usability in e-government services.

Finally, we have 'Automation of webpage quality determination' by Yadev. Webpages are a presentation medium, and as such, usability is an important feature. Yadev employs a user-centred approach that takes into account the pages containing the website, the webpage, and user preferences. Potentially, automatically derived quality estimates would be used to help rank order pages in an information retrieval system. A software prototype has been developed that has been tested in a medical information domain.

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