Editorial

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Biographical notes: Barbara D. Klein is an Associate Professor of MIS at the University of Michigan-Dearborn. She received her PhD in Information and Decision Sciences from the University of Minnesota, her MBA from the State University of New York at Albany, and her BA from the University of Iowa. She has published in *MIS Quarterly*, *Omega*, *Database*, *Information and Management*, *Information Resources Management Journal*, and other journals. Her research interests include information quality, user error behaviour, and information systems pedagogy. She has worked in the Information Systems Field at IBM, Exxon and AMP.

1 Introduction

As organisations of all types are increasingly reliant on information, an understanding of the quality of the information becomes more and more important to organisational success. In order to understand the quality of the information supporting organisational processes and decision making, one must first understand what information quality is and then understand how to assess it. The five papers presented in this issue focus on the assessment of information quality. The first three papers focus on the development of ways to assess information quality. These papers build on prior assessment work in the area of information quality by proposing innovative ideas and methods for assessing information quality. A common theme among these papers is the idea that information quality assessment is an especially challenging endeavour when information is exchanged across organisational boundaries. The last two papers apply methods of assessing information quality in new domains. One of these papers uses information quality assessment to understand student perceptions of degree programs that mix on-campus courses in a university located in one country and online courses delivered though a university located in another country. The other paper proposes a methodology in which information quality assessment is applied to recordkeeping systems.

2 Methods for assessing information quality

Because of interdependences among modern business organisations, many information systems facilitate the exchange of information between and among organisations. The first paper in this issue, 'Managing Data Quality in inter-organisational data networks' by Yu Cai and G. Shankaranarayananan, proposes a framework for assessing

information quality in inter-organisational information systems in which organisations exchange information. Since organisations exchanging information in these networks may not have direct knowledge about the ways in which information is collected, processed, and distributed, it is particularly important that they have a way to assess the quality of information received from other organisations. This paper uses the information product approach to address this need. A metadata specification for communicating information about information quality when information is exchanged among organisations is proposed and a technique for applying the specification is discussed.

The second paper, 'A Bayesian Network to represent a Data Quality model' by Angélica Caro, Coral Calero, Houari Sahraoui, and Mario Piattini, focuses on the assessment of information provided to users through web-based portals that facilitate access to information from a variety of sources of information. The paper builds on prior work in which 33 attributes for assessing the quality of information accessed through web portals were identified. This paper enhances this work by proposing a Bayesian network that recognises the probabilistic nature of information quality assessments in order to provide a structure for the attributes of information quality proposed in the earlier work.

Like the first two papers in this issue, the third paper 'Component comparison based information quality assurance' by Yanjun Zuo focuses on the problem of assessing information quality when information is provided by sources external to an organisation. This paper suggests a new method for assessing the quality of information provided by external sources by exploiting the idea that if information objects generated by different sources or using different methods are found to be similar they are more likely to be of high quality than if similar objects are generated by the same sources or methods. The proposed technique uses graph isomorphism detection to identify information objects that have been generated in similar or different ways.

3   Applications of information quality assessment

Increasingly universities are deploying courses online and these new approaches to delivering courses provide especially innovative opportunities for taking advantage of faculty expertise spread around the globe. One particularly interesting emerging trend is partnerships between universities in different countries in which students take on-campus courses in one country and interact in online courses with faculty physically located in different countries. The fourth paper, 'Perception of students on performance of dual-mode education: information quality perspective' by Latif Al-Hakim, reports an investigation into this type of arrangement in which students take on-campus courses at a university in China and online courses through an Australian university. The paper applies information quality assessment techniques in an examination of student perceptions of the degree program. The paper presents a novel application of information quality assessment measures and methods in the sense that previously reported applications of information quality assessment have not focused on educational institutions. The findings of the study show problems in the areas of accessibility, amount of information, objectivity, relevancy, and timeliness. Similar problems have been reported in other domains, and this paper demonstrates that problems in these areas may be generalisable across a wide variety of organisations.

The final paper 'RQAM: A recordkeeping quality assessment model proposal' by Erik A.M. Borglund applies information quality assessment methods to the question of whether systems that archive information over long periods of time are of a high quality. Most of the earlier work applying information quality assessment methods has focused on whether information that is currently in use is of sufficient quality for the task being performed using the information. However, information quality problems are likely to arise when information is not in regular use because there are no opportunities for users to detect information quality problems if information is not in regular use. This paper attacks this challenging problem by presenting a proposed method for assessing the quality of recordkeeping systems. The proposed method is developed through four case studies as well as theoretical perspectives on the quality of information and information systems.

4   Conclusion

In closing, I would like to thank Latif Al-Hakim for his excellent work in initiating and managing the *International Journal of Information Quality*. Although the field of information quality has had several excellent conferences at which academics and practitioners have presented their work for many years, it is only now that journals providing outlets for scholarly papers are being created. Dr. Al-Hakim has contributed greatly toward creating a much needed forum for the publication of work on information quality.

I would also like to thank the reviewers whose thoughtful suggestions have contributed greatly to the quality of the papers published in the journal.