



IDEA GROUP PUBLISHING

701 E. Chocolate Avenue, Hershey PA 17033-1240, USA
Tel: 717/533-8845; Fax 717/533-8661; URL-<http://www.idea-group.com>

ITB8266

Chapter XVI

**Managing Data Quality
in Accounting
Information Systems**

Hongjiang Xu, Andy Koronios and Noel Brown
University of Southern Queensland, Australia

ABSTRACT

Information is the key resource of today's organizations, and therefore, quality information is critical to organizations' success. Accounting information systems (AIS) in particular, requires high quality information. This chapter discusses critical success factors for data quality in accounting information systems. A model for factors that impact on data quality in AIS was proposed, and then examined in seven Australian case studies. The detailed discussion of each factor was included, and it was found that education and training, nature of AIS, and top management commitment are the most critical factors. The findings of the study would help organizations to focus on important factors to obtain better benefit from less effort. Top management, IT and accounting professionals should be able to gain the better understanding of accounting information systems' data quality management from the discussion of this chapter.

INTRODUCTION

Today's organizations are operating and competing in an information age. Information has become a key resource of most organizations, economies, and societies. Indeed, an organization's basis for competition has changed from tangible products to intangible information. More and more organizations are realising that quality information is critical to their success; however, not many of them have turned this realisation into effective actions. Poor quality information can have significant social and business impacts (Strong, Lee & Wang, 1997). There is strong evidence that data quality problems are becoming increasingly prevalent in practice (Redman, 1998; Wand & Wang, 1996). Many organizations have experienced the adverse effects of decisions based on information of inferior quality (Huang, Lee & Wang, 1999). It is likely that some data stakeholders are not satisfied in the quality of the information delivered in their organizations. In brief, information quality issues have become critical for organizations that want to perform well, obtain competitive advantage, or even just survive in the 21st century.

Accounting information systems (AIS) maintain and produce the data used by organizations to plan, evaluate, and diagnose the dynamics of operations and financial circumstances (Anthony, Reese & Herrenstein, 1994). AIS's data quality is concerned with detecting the presence or absence of target error classes in the accounts (Kaplan, Krishnan, Padman & Peters, 1998). Providing and assuring quality data is an objective of accounting. With the advent of AIS, the traditional focus on the input and recording of data needs to be offset with recognition that the systems themselves may affect the quality of data (Fedorowicz & Lee, 1998). Indeed, empirical evidence suggests that data quality is problematic in AIS (Johnson, Leitch, & Neter, 1981).

Thus, knowledge of the critical factors that influence data quality in AIS will assist organizations to improve their accounting information systems' data quality. While many AIS studies have looked at internal control and audit, data quality (DQ) studies focused on measurement of DQ outcomes. It appears that very few attempts to identify the critical success factors (CSF) for improving data quality in AIS. Thus, there is a need for research to identify the critical success factors that affect organizations' AIS DQ.

Information technology has changed the way in which traditional accounting systems work. There is more and more electronically captured information that needs to be processed, stored, and distributed through IT-based accounting systems. Advanced IT has dramatically increased the ability and capability of processing accounting information. At the same time, however, it also brings some issues that the traditional accounting systems have not experienced. One critical issue is the data quality in the AIS. When data quality issues have not been addressed properly, the IT advantages can sometimes create problems rather than benefit the organization. Information overload as an example; do we really need the quantity of information generated by the systems to make the right decision? Equally, in e-commerce settings, can the quality of data captured online be trusted?

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/managing-data-quality-accounting-information/24802

Related Content

Prototyping of Ubiquitous Music Ecosystems

Victor Lazzarini, Damián Kellerand Marcelo Soares Pimenta (2015). *Journal of Cases on Information Technology* (pp. 73-85).

www.irma-international.org/article/prototyping-of-ubiquitous-music-ecosystems/149962

Distance Education Initiatives Apart from the PC

José Juan Pazos-Ariasand Martín López-Nores (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 1162-1167).

www.irma-international.org/chapter/distance-education-initiatives-apart/13722

Bayesian Machine Learning

Eitel J.M. Lauria (2005). *Encyclopedia of Information Science and Technology, First Edition* (pp. 229-235).

www.irma-international.org/chapter/bayesian-machine-learning/14242

A metadata Model and Related Framework for Unstructured Document Management in Organizations

Federica Paganelli, Maria Chiara Pettenatiand Dino Giuli (2008). *Innovative Technologies for Information Resources Management* (pp. 289-315).

www.irma-international.org/chapter/metadata-model-related-framework-unstructured/23859

A Novel Ensemble Learning Model Combined XGBoost With Deep Neural Network for Credit Scoring

Xiaowei He, Siqi Li, Xin Tian He, Wenqiang Wang, Xiang Zhangand Bin Wang (2022). *Journal of Information Technology Research* (pp. 1-18).

www.irma-international.org/article/a-novel-ensemble-learning-model-combined-xgboost-with-deep-neural-network-for-credit-scoring/299924