

# Chapter 7

## XBRL: The Direction of E-Governance in the Capital Markets

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### ABSTRACT

*XBRL is a language that allows for the electronic communication of business information. In XBRL, tags are attached to items of information allowing that information to be exchanged and processed electronically. The architecture of XBRL facilitates more efficient electronic dissemination of information than does the traditional Web-based or PDF formats. The result is the potential for improved availability and accessibility of financial information and increased transparency. In effect, XBRL has the potential to improve electronic governance. For that potential to be realized, several challenges must be addressed. Concerns exist regarding data integrity, the costs of implementation, the training of employees, and the updating of XBRL taxonomies. Given both its potential and the limited number of studies on XBRL, more research is needed on XBRL implementation and use.*

### INTRODUCTION

Governance requirements and expectations in the global capital markets have changed dramatically over the last ten years. These changes are the result of the concurrence of corporate failures such as

Enron, which resulted in extensive changes in corporate governance regulations, and the availability of technologies like the internet, which allowed for the electronic reporting of corporate results. New corporate governance regulations have emphasized increased dissemination of information to market participants, increased transparency of corporate policies and strategies, and increased

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accountability to stakeholders. To address the increased corporate governance requirements, companies have used the internet and other available technologies to deliver information to investors and regulators. Much of this governance information is now disclosed and managed through an electronic medium. The electronic medium is in continuous evolution which is allowing for more efficient, more interactive, and more transparent electronic governance (or e-governance<sup>1</sup>). XBRL is a part of the evolution of the electronic medium and of e-governance.

XBRL or eXtensible Business Reporting Language is a language for the electronic communication of business information which works by attaching tags to items of information so that the information can be read, exchanged and processed electronically. XBRL improves corporate governance by improving the accessibility and transparency of company information and provides significant benefits in the preparation, analysis and communication of business information (XBRL Canada, 2010). Because of its benefits, XBRL is being mandated by financial regulators around the world. As companies begin to embrace the benefits that XBRL offers, XBRL adoptions and XBRL applications to deliver e-governance will undoubtedly increase.

This chapter reviews the potential of XBRL as an instrument of e-governance in the capital markets. The structure of the chapter is as follows: first, XBRL is described; second, e-governance in the capital markets is briefly reviewed and the capabilities of XBRL as a language for electronic communication and e-governance are discussed; third, an overview of the limited empirical research on XBRL implementation and use is provided; fourth, the application of XBRL in the global capital markets (e.g., United States, Australia, China and Canada) is reviewed; and finally, a discussion of the future of XBRL as a tool in the evolution of e-governance in the capital markets is presented.

## **What is XBRL?**

XBRL is a language for the electronic communication of business and financial data and is one of the family of XML languages. XML or Extensible Markup Language is a recognized text format that allows the electronic exchange of a wide variety of data on the internet. Under XML, identifying tags are applied to items of information so that they can be processed efficiently by computer software (XBRL International, 2010a). XML, however, was not developed for the electronic exchange of financial information. It was Charles Hoffman, a CPA in the United States, who adapted XML for financial information and this led to the development of XBRL (Efendi et al., 2009; Cohen et al., 2005). Subsequently an international non-profit consortium, XBRL International, was established (XBRL International, 2010a). A more extensive discussion of XBRL's development can be found in Cohen (2009), Boritz and No (2004) and Cohen et al. (2005).

## **How XBRL Works**

XBRL is designed to attach computer readable tags to financial and non-financial data. The tags identify the information along a number of dimensions such as the nature of the item (e.g., whether it is a monetary item) and the format of the data (e.g., whether it is a percentage or a fraction) (Boritz and No, 2004; XBRL International, 2010a). XBRL tags enable the automated processing (i.e., select, analyze, store and exchange) of financial information by computer software and the presentation of financial information to meet the reporting requirements that must be followed by most industries and companies (XBRL International, 2010a; Brashear, 2009; Cohen et al., 2005; Cohen, 2004). An XBRL report (i.e., instance document) is created by mapping company specific financial information to XBRL elements which are included in a taxonomy (Boritz and No, 2004). Taxonomies are hierarchical dictionaries which contain lists

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