

INTEGRATING EXTENSIBLE BUSINESS REPORTING LANGUAGE INTO THE CLASSROOM

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ABSTRACT

XBRL is a new technology which can revolutionize the way information is analyzed, transferred and reported. This new language allows financial information to be entered into a computer system only once and then rendered into literally any format desired by the user. XBRL enables seamless communication of data between disparate accounting information systems and proprietary software and/or hardware. It offers a methodology for overcoming both internal and external communication barriers caused by incompatible information systems. XBRL does this by providing an internationally-recognized language for transmitting financial data. This paper discusses this new technology and offers suggestions for integrating XBRL into the business classroom.

INTRODUCTION

As with the electronic spreadsheet of the late 1980's, extensible business reporting language (XBRL) is poised to revolutionize the business world. This new technology will significantly alter the way many business professionals view both internal and external financial reporting. Its implementation will bring sweeping changes to every aspect of the information-supply chain.

Educators need to equip students with time-proven analysis skills and expose them to the cutting edge technology that is currently available in the global marketplace. The goal of this paper is to not only introduce education professionals to technological innovation that will have far-reaching impacts on the business and educational communities, but to also present practical methods for integrating this new web-based computer language into their classrooms.

DEFINING XBRL AND ITS POTENTIAL IMPACT ON THE INTERNATIONAL MARKET

XBRL can be likened to the advent of the Uniform Product Code (UPC) for business products. Initially, product coding was used sparingly by manufacturing and retail organizations. While beneficial for monitoring inventory movement *within* a firm, use external to the firm was too unwieldy. Without standardization of product codes, each agent in the physical supply chain had to cross-reference their code for products with others' private codes to move their goods through various distribution centers. And at each of these conversion points, the identification process, which would be primarily manual in nature, would not only be slow and inefficient, but would also be prone to errors. It was only until these codes became standardized that the full potential of UPC technology could be efficiently employed.

Like UPC technology, XBRL allows the electronic transfer of business information in an efficient manner. It also allows for the inclusion of additional information that expands the usefulness of that

information. More specifically, XBRL allows *context* as well as *content* to be communicated in individual data elements for financial reporting. Data essentially becomes “metadata” and is capable of incorporating much more information within each data element than has ever been dreamed possible.

In essence, XBRL is a new global open standard for formatting any type of financial information, whether that information is generated and remains internal to the firm, or is disseminated internationally in the form of financial statements and regulatory reports. It is a language designed for the electronic communication of financial data that can be utilized world-wide, regardless of the computer system or even the language being employed. The objective of this new technology is to provide a standardized language which will enhance business performance and statutory reporting.

INTEGRATING XBRL INTO THE CURRICULUM

Given the potential impact of this technology, a key question that needs to be addressed is how XBRL implementation will affect the activities and responsibilities of various business professionals in the corporate world. Ancillary to this issue is the level of knowledge that will be required of students entering this global marketplace. Every business-related group of individuals - investors, banks, regulators, accountants, managers - will be affected differently by this new technology. The perspectives and responsibilities of the members of each group are markedly different, and therefore the impact of this new technology will, by definition, also be different.

And the same holds true for discipline-specific courses in a business school. Pertinent background information on XBRL will vary by course discipline. Management majors will require a different knowledge set than will accounting majors, who will in turn require a different perspective on the new technology than will finance or banking students. Addressing the potential impact of XBRL on business in the real world, should supply an excellent starting point for professors wishing to incorporate this new technology into their courses.

An efficient approach could begin with a discussion of the theory of information. This might be viewed historically in the context of manual versus electronic processing of data or could simply be addressed from the perspective how information is utilized by different stakeholders in the information supply chain. Whatever approach is taken, the most relevant point that needs to be conveyed is the *nature* of that information, and how precise, accurate, reliable information enables the business professional to meet his or her professional responsibilities.

Additionally, a discussion of Internet-based commerce as well as current regulatory efforts (such as the Sarbanes-Oxley Act) could help underscore the need for XBRL in the marketplace. Discussing in more detail how XBRL works and why it is significantly different from any computer language to date would help students better understand the potential of this new technology. The end and aim of any of these discussions is to provide a workable introduction to XBRL so that students can better understand not only what kinds of decisions they will be called upon to make in the future, but also how XBRL provides a revolutionary approach to helping them to make those decisions.

A complete discussion of the methodology needed to integrate XBRL into the curriculum of every business-related discipline would not be practical given the length constraints of this paper. Therefore, the following discussion will address how XBRL will impact a specific area in the business environment: management. This discussion is designed to briefly outline the benefits of this new technology for managers and to demonstrate how XBRL can reshape the way business functions are

currently being performed. It is also designed to provide an example of discipline-specific background material for professors who wish to incorporate XBRL into their respective business classes.

THE IMPACT OF XBRL ON MANAGERS

The essence of good management is the ability to identify both problems and opportunities in an organization and to have enough time to act upon that information. Additionally, because of recent high-profile corporate collapses, such as Enron, legislation like the Sarbanes Oxley Act is establishing new reporting and disclosure requirements that mandate that firms improve the way business information is created and ultimately disseminated. Government regulators are increasing their requirements for more disclosure and earlier reporting deadlines and are forcing managers to develop cost-efficient ways to provide more reliable information, faster. In meeting these informational demands, managers are finding that they must oftentimes restructure and reformat information in a multitude of ways to not only meet external reporting requirements, but to also organize data produced internally from disparate operations worldwide.

Oftentimes the time necessary to collate an internal or external report can be painstakingly slow because the disparate systems, both internal and external to the firm, do not “talk” well with each other. The work required to convert this dissimilar data into a usable form is primarily a labor-intensive, manual process which is often fraught with errors. While physical and electronic interfaces can be developed to help mitigate some of these problems, they are often cost-prohibitive as the number of required connections to different segments of the firm increases with company growth.

XBRL provides an open standard for disseminating information. It avoids the stumbling blocks of disparate internal information systems by offering a system of transmitting data that is truly “seamless” in nature. Because XBRL can be read by any system, there is no need to restructure data into the format required by different proprietary systems, nor do firms need to invest in expensive interfaces between different operation centers within the firm. XBRL provides both neutral software and platform capabilities for sending data across divisions or across the world. With XBRL, managers can spend much less time obtaining and consolidating business information and more time analyzing that data at any level of detail they choose.

XBRL can greatly streamline the external reporting process and at the same time reduce both time and costs for any organization. Data developed in an XBRL system is not position-restricted. The location of any item of data in a report is not important in XBRL because of the data identification tagging that is programmed into each data item. This enables users to extract at will whatever data is pertinent to their analyses. This also enables the management of a company to publish only *one* report for *multiple* uses.

CONCLUSION

Like the introduction of the microcomputer in the early 1980’s, when the first electronic spreadsheet was developed, many questioned its potential impact. Many believed these technological advances to be little more than toys to be used for entertainment. Given the revolutionary changes brought about by these innovations, business professionals and academicians alike cannot afford to view the emerging XBRL technology in the same light. XBRL has the potential to reshape the way the world processes electronic information, and academicians in particular should be providing their students with the tools they will need to compete effectively in this new environment.