

# AN EVOLUTIONARY APPROACH OF INTERNET FINANCIAL REPORTING<sup>1</sup>

CĂTĂLINA GORGAN, VASILE GORGAN

ACADEMIA DE STUDII ECONOMICE BUCUREȘTI, PIAȚA ROMANĂ, NR.6, BUCUREȘTI,  
catalinagorgan@cig.ase.ro, gorganv@cig.ase.ro

## **Abstract:**

*In a world characterized by globalization and its effects, companies struggle to get access to investors. In order to get visible companies must use all available channels to disclose their financial information. Internet Financial Reporting is getting increased attention lately thanks to its benefits consisting in low cost, wider reach, frequency and speed. This paper contributes a theory-based analysis of the state of the art in Internet Financial Reporting, emphasizing the role that the XBRL plays in this area.*

**Key words:** *Internet Financial Reporting, XBRL*

**JEL classification:** *M41, L86*

## **1. Introduction**

In the late twentieth century and the beginning of the XXI century a phenomenon popularized and equally controversial has made its mark on world states: the globalization. Even though to varying degrees, it included almost all areas (economic, social, political, cultural, etc.).

The term globalization has emerged in the late '60s, released by professor Marshall McLuhan from University of Toronto, a Canadian expert in communication theory, and Zbigniew Brzezinski from Columbia University, an American specialist in „communism issues” (Mamulea, 2001). McLuhan used for the first time the expression „global village” extrapolating the lessons of the Vietnam War. The adjective "global" with the previous meaning „spread throughout the world”, was given another meaning from this combination with the word „village”, the resulting expression referring the fact that thanks to electronic communication the contact between individuals knows the same speed and efficiency with which it occurs in small rural communities.

Globalization has occurred as a result of the following essential trends, emphasized especially in the relations between developed countries but also existing in the relations between these ones and other countries: spread throughout the world of scientific and technical progress, easy transmission of ideas and concepts from different areas due to the development of modern telecommunications and information systems, creation of similar institutions, structures, political and economical mechanisms in different countries as a result of capitalism and democracy expansion; homogenization of lifestyles and consumer preferences especially in the middle class in western countries (Dumitrescu & Bal, 2002).

A key aspect of the study of globalization is the emergence of a global system, which means that, to some extent, we have to see the world as a single social order (Mamulea, 2001). In the context of globalization, national barrier against the free flows of goods and services, capital, personnel and immaterial information are removed. Companies have a natural evolution toward concentration of capital and acquisition of economic and financial power that leads them to internationalization (through external trade, foreign investment, etc.). Thus, as a result of successive merger and acquisition

activities in the world economy, a global market of multinational companies appeared. Following the opening of borders and access to new markets, companies that wanted to enjoy the privileges of globalization, have been put in the position to present their financial statements to investors outside the borders of their countries and to prepare consolidated financial statements starting from the individual financial statement build under sometimes diverging national accounting systems.

As stated before, globalization has benefited from technological progress, especially in information and communications. The Internet facilitated the access to information available in digital format. Sharing and exchanging information using the Internet has not only improved global economy but also created new opportunities and new challenges for business (Wang, 2007). The increasing number of online investors, the use of HTML (hyper text mark up language) which enabled information searching on the web, the use of XML which offered the opportunity to develop business applications that are users friendly and platform independent, determined companies to turn to online financial reporting.

## **2. Internet Financial Reporting from printed, online published reports to XBRL**

Internet Financial Reporting is getting increased attention lately. Internet reporting has the benefits of low cost, wider reach, frequency and speed. The technology shift determined changes in corporate financial reporting. Sir Bryan Carsberg, the Secretary-General of IASC has stated that: "Technology has altered irreversibly not only the physical medium of corporate financial reporting but also its traditional boundaries." (Venter, 2002). According to some authors the printed annually reports will eventually disappear as corporate reports increasingly move to the world wide electronic medium of the Internet (Beattie & Pratt, 2003). One reason why companies choose to present their financial information using the Internet is their interest in presenting their favorable results to the potential investors (Bonsón & Escobar, 2006). Among the benefits of using online financial reporting can be mentioned: the reduction in the time delay between the preparation of financial reports and the receipt of the information by the investor; the disappearance of borders and the creation of a single global market.

FASB steering committee identified the following list of potential advantages for companies which uses online reporting (Venter, 2002):

- Reducing of costs and time required to disclose information;
- Communication with previously unidentified information users;
- Enrichment of traditional disclosure practices;
- Enhancing small companies access to potential investors.

The drawbacks of online financial reporting must also be considered. There are concerns related to the difficulty to distinguish between audited and non-audited information, the problem of misleading information and additional difficulties for regulating on-line financial reporting and soft data (Beattie & Pratt, 2003).

IASC divided Internet Financial Reporting in 1999 into three stages (Debreceeny, Gray, & Rahman, 2002) (Venter, 2002). At a first stage the Internet is used exclusively as another distribution channel for existing printed reports. The content of financial report of companies is very similar to financial disclosure on paper-based documents, the format used being optimized for human review, not for automatic location, acquisition, arrangement and classification. At the second stage companies publish their financial information in a format which allows browsers and search engines to use them interactively. At the third stage companies provides standard information which usually appear in a printed report and additional information which otherwise would be difficult to obtain. Interactive tools to analyze information can also

be provided. In more advanced application a “what-if” analysis tool is offered. The next step in Internet Financial Reporting is considered to be the XBRL (eXtensible Business Reporting Language).

### **3. XBRL Information System**

XBRL stands for eXtensible Business Reporting Language. It is the product of XBRL International ([www.wbri.org](http://www.wbri.org)), a non-profit consortium of over 450 global financial service, technology, stock exchange, and accounting organizations. It is the adaptation of the XML to the business environment. The history of XBRL begins in 1998 when a CPA, Charles Hoffman investigates how XML could be used for electronic reporting of financial information developing prototypes of financial statements and audit. Today XBRL is growing quickly around the world with increasing participation from individual countries and international organizations (XBRL Canada). A range of national and international bodies and groupings also maintain a strong interest and close liaison with XBRL.

The idea behind XBRL is simple. XBRL is an effort to add “information about information” to the ways computers for financial functions relate to each other. It is the link between the data itself and meaningful descriptive information. In essence, XBRL brings context to numbers by tagging financial data points with information about that data, in effect standardizing it. Using XBRL every item of a financial statement is coded using a string of computer code, dubbed a “tag”, such as `<NetIncome> 5,465 </NetIncome>`. The codes can be used for text as well as numerical amounts. These tags (labels) form a relevant context and stay with the data point through its life cycle. A set of such labels is called the “XBRL taxonomy”. A taxonomy contains business reporting concepts, mathematical and definitional concepts, text labels in multiple languages, references to authoritative literature, and information concerning the way to display each concept to the user.

The XBRL information system consists of two major components: a XBRL instance and its associated taxonomy set. A XBRL instance document is a XML file that conforms to one or more XBRL taxonomies and contains some or all of the data in a financial report. The most basic components of a XBRL instance are facts, which are pieces of information being reported through the instance. XBRL taxonomy is a vocabulary which defines the syntax for the terms and metadata such as descriptions of the terms and relationships between them. A XBRL taxonomy is essentially a XML schema or XSD file. It defines the elements and attributes that are expected in XBRL instance documents. It does not contain data. Data contained in a XBRL instance is interpreted by accessing its associated taxonomies.

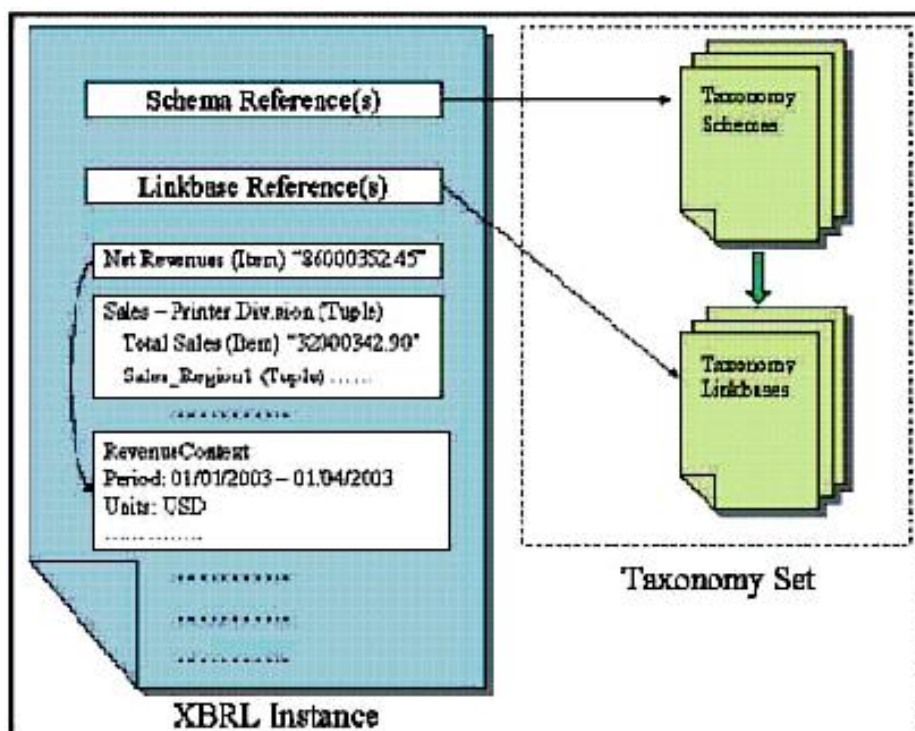


Figure 1 XBRL information system (Pandurangi, 2003)

#### 4. The benefits of Internet Financial Reporting with XBRL

XBRL literature presents huge and various benefits of using eXtensible Business Reporting Language for online reporting. These benefits appear especially in promotional article (XBRL International) (Cohen, 2004) but also in academic literature which initially considered the potential of XBRL in digital reporting and auditing (Debreceeny, Gray, & Rahman, 2002).

According to XBRL.org website the use of XBRL can lead to more cost saving, faster, more reliable and more accurate handing of data, improved analysis and in better quality of information and decision making (XBRL International, 2010). The main challenges encountered by analysts and finance professionals in the process of financial reporting are to efficiently: author reports, analyze financial data, share financial data and verify data.

Authoring financial reports is a time consuming process and represents a significant cost for many companies. Problems arise especially when financial reports are created across multiple divisions. It is likely that different organization use different systems with different data formats. This situation requires data normalization before integrating it into a single report. To normalize data it often must be manually reentered which can be an inefficient and error-prone process. XBRL can be efficiently used to author reports because XBRL data must conform to taxonomies. Data is automatically normalized and can be automatically displayed in multiple ways without manual intervention, such as data reentry.

One of the advantages that XBRL offers to the analysts refers to search engine facilities (Hodge, Kennedy, & Maines, 2004). Analysts can extract the information they need searching for the appropriate tag no matter where the information resides in the financial report. This enhances transparency in financial reporting because the user of financial data can recognize when different firms have made different choices for similar transaction. Search engine facilities make the analysis of large amount of data

easier. An analyst can discover all the information he need regarding a specific subject. In a non searchable environment due to the large amount of information he could ignore a part of value information involved in analysis. This feature is useful when financial reports built under divergent accounting standards are compared (Vasile & Catalina, 2006).

In order to assure accurate data and maintain credibility in the market, reporting accuracy and transparency must be assured. On the other hand analysts must verify data to have confidence in their analysis. The verification is often a manual process, and it is an extremely time-consuming task that takes time that the analyst might otherwise use to broaden the analyses that they perform. Using XBRL data is verified efficiently. Finance executives easily verify if their data meet local compliance and regulatory requirements. Using an open standard for publishing financial reports creates premises to maintain financial transparency.

The benefits of using XBRL for Internet Financial Reporting are revealed not only by promotional articles but also by empirical studies. According to a study on the financial market in Korea (Yoon, Zo, & Ciganek, 2010) early adoption of XBRL by companies has the effect of reducing information asymmetry. Taking into account factors as firm size, turnover rate, volatility, and stock price, the study shows that the effect of XBRL adoption is more pronounced for large firms than for small firms. Another study conducted by Premuroso and Bhattacharya in 2007 (Premuroso & Bhattacharya, 2008) revealed that the decision to publish financial statements in XBRL format is associated with superior corporate governance. They also found that firm performance factors including liquidity and firm size are associated with the early and voluntary XBRL filing decision.

## 5. Conclusions

The changes in the global economy due to globalization have lead to an increasing need of financial information. In order to maintain their competitive advantage, corporations publish large amount of financial data. Low cost, wider reach, frequency and speed makes the Internet an excellent channel for information distribution. In the last decades Internet Financial Reporting evolved from printed reports published online to powerful and flexible formats as XBRL. XBRL provides major benefits in the preparation, analysis and communication of business information (Boritz & No, 2004). Due to its intelligent search capabilities XBRL facilitates data extraction and comparison, enhancing transparency in global financial reporting. Despite the fact that the adoption and impact of XBRL seem to progress slower than anticipated (Locke & Lowe, 2008), XBRL is growing around the world with increasing participation from individual countries and international organizations. In this context, XBRL International recently announced its newest Provisional Jurisdiction: XBRL Romania.

## REFERENCES

1. Beattie, V., & Pratt, K. (2003). Issues concerning web-based business reporting: an analysis of the views of interested parties. *The British Accounting Review* , 155–187.
2. Bonsón, E., & Escobar, T. (2006). Digital reporting in Eastern Europe: An empirical study. *International Journal of Accounting Information Systems* , 299–318.
3. Boritz, J. E., & No, W. G. (2004). Security in XML-based financial reporting services on the Internet. *Journal of Accounting and Public Policy* , 11–35.

4. Cohen, E. E. (2004). Compromise or customize: XBRL's paradoxical power. *Canadian Accounting Perspectives*, 187–206.
5. Debreceeny, R., Gray, G. L., & Rahman, A. (2002). The determinants of Internet financial reporting. *Journal of Accounting and Public Policy*, 371–394.
6. Dumitrescu, S., & Bal, A. (2002). *Economie mondială*. București: Editura Economică.
7. Hodge, F. D., Kennedy, J. J., & Maines, L. A. (2004). Does Search-Facilitating Technology Improve the Transparency of Financial Reporting? *The Accounting Review*, 687–703.
8. Jones, M. J., & Xiao, J. Z. (2004). Financial reporting on the Internet by 2010: a consensus view. *Accounting Forum*, 237–263.
9. Locke, J., & Lowe, A. (2008). XBRL: An (Open) Source of Enlightenment or Disillusion? *European Accounting Review*.
10. Mamulea, M. (2001). Globalizarea ca ipostază modernă a acculturăției. *Revista Respiro*
11. Pandrangi, S. (2003, 10 3). *A Technical Overview of XBRL*. Retrieved from XMLJournal: <http://xml.sys-con.com/node/40706>
12. Premuroso, R. F., & Bhattacharya, S. (2008). Do early and voluntary filers of financial information in XBRL format signal superior corporate governance and operating performance? *International Journal of Accounting Information Systems*.
13. Vasile, G., & Catalina, G. (2006). Is XBRL a way to the promise land of accounting convergence? *Journal of Accounting and Management Information Systems*, 75-83.
14. Venter, J. (2002). A survey of current online reporting practices in South Africa. *Meditari Accountancy Research*.
15. Wang, Z. (2007). The Benefits and Problems of Online Financial Reporting with XBRL. *BAA Annual Conference*. London: British Accounting Review Research Register.
16. XBRL Canada. (n.d.). *Around the world*. Retrieved 2 2010, from Transforming business reporting: <http://www.xbrl.ca/index.php/what-is-xbrl/around-the-world>
17. XBRL International. (n.d.). *An Introduction to XBRL*. Retrieved from XBRL International: <http://www.xbrl.org/WhatIsXBRL/>
18. XBRL International. (2010). *Benefits and Beneficiaries*. Retrieved 2 2010, from XBRL International: <http://www.xbrl.org/BenefitsAndUses/>
19. Yoon, H., Zo, H., & Ciganek, A. P. (2010). Does XBRL adoption reduce information asymmetry?, *Journal of Business Research*.

---

<sup>i</sup> This research was financed by the Research Contract 855/2007 STUDIU PRIVIND OPTIMIZAREA CURICULEI EDUCATIONALE CONTABILE IN CONTEXTUL EVOLUTIEI SOCIETATII ACTUALE