



# SUSTAINABILITY REPORTING – U.S. IN 2010

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## 1. Introduction and Purpose

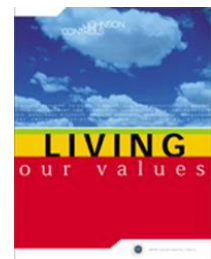
In 2003, 44% of the top 100 U.S. companies (by market capitalization) generated a report that outlined corporate citizenship behavior. Whereas the most comprehensive reports covered all aspects of the triple bottom line (TBL), some were simple collections of mini-cases discussing environmental or social success stories. With such variety in reporting, it is nearly impossible to compare firms, even when firms are reporting on roughly similar criteria. Furthermore, with no mature reporting criteria and supporting (or mandated) collection practices, reporting is a difficult and time-consuming process. Tim Mohin, Director of Sustainable Development at Intel Corporation, explained that at the moment their Citizenship Report is published, the team is already beginning to collect data for the following year's report.<sup>1</sup> If nothing else, mature reporting guidelines or standards will make reports easier for firms to produce, and even more so, easier for analysts and interested parties to interpret.

The fact is, however, a *lack* of guidelines is not the issue. A UNC Kenan-Flagler Business School white paper describes thirteen different emergent guidelines, all used by various parties to determine the extent of a firm's behavior.<sup>2</sup> The issue is rather the plethora of standards, or even more of an issue, the extent to which firms report inconsistently against the standards they choose. In the course of this white paper, we will explore the possible futures of sustainability reporting in the United States over the next five years, imagining what U.S. sustainability reporting will look like in 2010. We will do this using scenario analysis, assessing what we consider to be the most important sources of uncertainty in sustainability reporting: the extent to which common "standard" reported content emerges, and whether a technology or process innovation will emerge that facilitates the collection and publication of this content. We will conclude with a discussion of how the application of eXtensible Business Reporting Language (XBRL) can not only be the facilitating innovation in sustainability reporting, but can largely mitigate the differences between our selected possible future scenarios.

We believe that the emergence of XBRL and the convergence of U.S. corporate reporting practices on some iteration of the Global Reporting Initiative (GRI) will be a boon for firms that are committing

<sup>1</sup> From a panel discussion with Tim Mohin at the 2004 Net Impact National Conference at Columbia Business School.

<sup>2</sup> C. Mitchell, D. Holt, R Swartz, A. Kido, J. Song, and K. Kolind, "Measuring Sustainability," written for MBA251: Sustainable Enterprise. Available for download at <http://www.cse.unc.edu>.



more time and effort to increasingly sophisticated reporting of triple bottom line behavior. Furthermore, for consultancies and auditing concerns anticipating these future scenarios, positioning a practice either implementing sustainability stewardship or auditing practices in the U.S. should yield a promising future.

## 2. Trends and Uncertainties

Typical scenario analysis begins with understanding the trends and uncertainties ahead. For sustainability reporting, the trends seem clear:

- **More and more of the U.S. Fortune 100 will produce some kind of sustainability or responsibility report that stands separately from their annual financial report.** Where in 1999, 30% of the U.S. Top 100 provided a sustainability report, that number grew to 36% in 2001,<sup>3</sup> and is informally at 44% in 2003. By 2010, it is not unreasonable to expect that the vast majority of top U.S. firms will report on their TBL performance.
- **More and more of these reports will be read by investors and analysts, which should ratchet expectations for report content and cross-company consistency.** As of this writing, the diversity in what is reported and how existing guidelines are interpreted makes it clear that there lacks the rigor in sustainability reporting that we enjoy in financial annual reporting. However, with socially responsible invested capital growing from \$100 million in the 1980s to \$2.2 trillion today and 50% of investment houses offering socially responsible investments,<sup>4</sup> more and more investors seek rigorous and comparable information from sustainability reports. A specific example, CalPERS (the largest public pension fund in the U.S.) is very active in screening investment targets for TBL behavior.<sup>5</sup>

While there are a large collection of uncertainties that may affect the future of sustainability reporting, a few stand out that could shape this emergent business practice:

- The extent to which public pressure will shape reporting, particularly around social behavior or corporate governance
- The extent to which companies doing business in Europe (where citizenship reporting is more regulated and commonplace) will be required by EU trade policy to furnish corporate-level reports, rather than regional, in-country reports
- The extent to which reporting guidelines will converge on a single reporting standard
- The extent to which a process or technology innovation will emerge to enable and facilitate TBL reporting

We consider that the most important uncertainties to address are the latter two. Corporations are reporting more and more without an upsurge in public pressure or trade regulation, and so the question is not *whether* reporting will be pervasive, but *what* will be reported, *how* companies will generate reports, and *what* value investors, analysts, and interested stakeholders will derive from studying corporate sustainability reports.

## 3. Scenarios

Our scenarios will be derived from the two uncertainties of the extent to which reporting guidelines converge on a single standard and whether some innovation will facilitate the reporting processes. We define the range of possibilities as follows:

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<sup>3</sup> KPMG *International Survey of Corporate Sustainability Reporting 2002*, p. 14.

<sup>4</sup> Andrew Savitz, partner in governance risk and compliance group, PricewaterhouseCoopers, as quoted in "Managing and Reporting Sustainability" by David Crawford. *CMA Management*. Feb 2005, p. 21.

<sup>5</sup> <http://www.wbcd.ch/plugins/DocSearch/details.asp?type=DocDet&ObjectId=MTQwMjk>.

**Sustainability reporting guidelines emerge as commonly-adopted standards:**

- *Not at all* - Firms benchmark against any or all of 10 or more guidelines that suit them. Comparing firms is possible only in comparisons where firms voluntarily choose the same criteria and report data uniformly.
- *Industrially* - Firms benchmark against guidelines that appeal to their sector or industrial activity, with firms in the same sector reporting on the same guidelines. Firms in the same sector are relatively easy to compare, but comparison between industries is difficult, as different criteria and interpretations are likely.
- *Completely* - Firms adopt a single standard (much like GAAP is for financial reporting in the U.S.). Comparing data between firms of any industry is relatively simple, and analysts are able to make their own judgments about whether one industry should behave differently from another.

**A technology or process innovation enables routine data collection, report assembly, data dissemination, and better alignment of data with management processes:**

- *Not at all* - Firms continue to use homegrown processes and volumes of electronic and paper communications to pull together reported data. Assembly and approval takes a large team of people and a long period of time, implying that resources focused on sustainable business are looking at last year’s behavior, rather than next year’s targets.
- *Uniformly* - All firms that do sustainability reporting are able to take advantage of data collection, mining, translation, or reporting innovations that collect and represent criteria consistently. Considerable budgetary and human resource is freed from gathering past data and is able to consider future direction and strategic initiatives, effectively converting sustainability reporting from a retrospective tool into a management tool.

The six combinations of these two uncertainties define a collection of scenarios that, while not describing all possible futures, are intended to enable us to consider a range of possible futures. They are each evaluated for plausibility (that is, whether or not there is a possible course of events that will lead to them), and for the extent to which they are novel enough to think creatively about how to respond to the future of sustainability reporting. In short, scenarios are not intended to be predictions – they are intended to help us visualize possibilities. Our scenarios are as follows:

		Extent of Standards Convergence		
		Not at All	Industrially	Completely
Emergence of Process or Technology Enablers	Not at All	<u>Scenario 1</u> Wild wild west	<u>Scenario 2</u> Apples and Oranges	<u>Scenario 3</u> Moving Forward, stuck in a rut
	Uniformly	<u>Scenario 4</u> From chaos, order	<u>Scenario 5</u> Systems plug-in bonanza	<u>Scenario 6</u> Good day for auditors

Figure 1: Scenarios

Based on a survey of a subset of the U.S. Top 100 firms, we found that roughly half of the reports reviewed cited the GRI as a guide to the content in the report. Of those that cited any standard, we

found that GRI was by far the most common. Therefore, we will venture to guess that even if uniform adoption of a common guideline is uncertain, that there will be some adoption of a guideline. We therefore considered Scenarios 1 and 4 to be implausible for this analysis. This leaves us with four "live" scenarios, which will be discussed in more detail below.

### *Scenario 2: Apples and Oranges*

In the Apples and Oranges scenario, we see a mismatched landscape of pieces of information that divulge different degrees of information regarding businesses' sustainable practices. While this scenario shows some convergence in reporting standards amongst specific sectors and industries, there isn't one over-arching best practice with which companies, stakeholders and investors can compare firms against each other. Additionally, the methods of reporting within each organization continue to be gathered and written in a costly and largely reactive fashion due to a lack of advancements in information technology.

How this scenario emerges from the Wild, Wild West scenario is likely due to governmental pressure calling for some tangible way to measure firms' output. This type of "sustainable" reporting, potentially first paved by sectors that have been traditionally mandated the need to disclose waste figures, could have triggered stakeholders' interest in a need for more information and reporting across a farther reaching breadth of industries. As this trend gained momentum, increasing numbers of sectors began to benchmark their own practices against their competition. In this scenario the information that is reported slowly becomes tailored to what each sector chooses to disclose; however, momentum stagnates before standards can be applied across all industries. What remains is a clustered grouping of industries with no comprehensive reporting measure across all sustainable practices.

From the technology perspective, the Apples and Oranges scenario represents a continuation of prevailing reporting tools, or lack thereof. Sustainable initiatives at the firm level are repetitively met with resistance due to the money needed to spend on research and manpower. The outdated infrastructure restricts necessary flow of information between departments ultimately resulting in data that doesn't enable firms to take a forward-facing approach to sustainable enterprises. It is likely that upper-level management could be reluctant to risk capital on a technology/information sharing platform without seeing a clear return on investment. In this space, the companies that manage to cobble together a legacy system of data and communication succeed in translating the best information to the public.

This scenario isn't much unlike where the current U.S. landscape is today. Many industries are in the "feeling out" stage of what may take to meet reporting standards in years to come. While some take lead roles in becoming transparent on triple bottom line issues, others need guidance. But who is positioned to swoop in and compare apples to apples and oranges to oranges? Sustainability consultants, of course. In this scenario, the consultants are the real winners. They can help make sense of all the jumbled information that is out there and help others meet growing stakeholder interest in that information. The evolution of this scenario could eventually see industry specific consultants that are specific to that industry. Additionally, without an emerging technology platform to gather and exchange information, consultants could again become the beneficiaries of inefficiency. Faced with the mounting financial and logistical burden of reporting the information, firms may again have to turn to technology and information specialists to generate information needed to meet industry reporting benchmarks.

Overall, this scenario represents a less than favorable, but familiar outcome generated from our proposed uncertainties. For sustainable reporting to stagnate at these levels is doubtful due to many internal and external forces. The quantum leaps in information sharing that we have enjoyed over the last decade coupled with a rapidly growing global competitive marketplace will force the hand of most organizations into action at some point in the near future.

### *Scenario 3: Moving Forward, Stuck in a Rut*

The moving forward stuck in a rut scenario occurs if a standard such as GRI continues to gain momentum among U.S. companies without the development of an enabling technology to standardize and facilitate the data collection and communication of triple bottom line corporate information. The extreme corollary in Financial Reporting would be to imagine GAAP without debit and credit accounting. The name of this scenario mixes optimism over the convergence to a standard with some healthy pessimism over the challenges of auditing and verifying reports produced by a mélange of homegrown social and environmental management systems, policies and protocols.

We have already discussed the popularity of the GRI amongst American firms currently producing non-financial reports. As the 56% of firms not reporting in 2003 respond to their competitors' initiative in sustainability reporting, it can easily be envisioned that they will study the best practices of current reporters and that GRI should continue to gain favor with American firms. As this trend continues the first requirement for Scenario 3 will be in place. A single standard like the GRI, though voluntary, can become the de facto requirement for sustainability reporting once a significant number of firms have adopted the initiative. Convergence to one standard, however, does not guarantee full transparency unless verification and auditing procedures can be realistically implemented. Given current trends amongst reporting companies, it is not clear that a uniformity of practices can emerge that would lead to the adoption of a comprehensive IT or EMS solution.

Despite significant efforts at a third generation GRI standard with more detail and guidance for reporting firms, this voluntary reporting effort can do little to standardize data collection and environmental and social management practices. Even among current U.S. firms with the most comprehensive sustainability reporting efforts, few to none sought external assurance of their report. Though some standardization occurs among firms choosing to seek ISO 14001 certification or amongst facilities certified for OHSAS 18001, this still leaves a considerable amount of intra- and inter- firm variability in health and environmental recordkeeping, not to mention the lack of any standards for tracking a firm's social impacts such as stakeholder engagement, philanthropy, and workers' rights. Examples of this recordkeeping variability include Dow and Dupont's management systems which are developed to conform to the mandatory Responsible Care™ initiative of the American Chemistry Council (ACC) versus a company like Alcoa which has developed a homegrown metrics system for all "environmental, health, and safety data collection and analysis, incident management, and reporting."<sup>6</sup> This system allows Alcoa the wherewithal to provide real-time safety data on their website. A recent visit to Alcoa.com revealed:



#### Safety Performance

As of Monday, April 25, 2005, 03:45 Greenwich Mean Time (GMT), Alcoa's lost workday rate for 2005 stands at 0.069. Alcoa calculates and publishes this rate in real time. It represents the number of injuries resulting in a lost workday per 200,000 hours worked.

Impressive as this may seem, Alcoa's metrics system is not externally verified, though the company is seeking corporate-wide certification to the ISO 14001 EMS Standard. Conversely, the ACC's mandatory program requires independent verification of all member companies' Responsible Care Management Systems by December 31, 2007 by independent auditors.<sup>7</sup> As different industries, companies, and even divisions continue to develop unique technologies for accomplishing the collection, management, and audit functions that can lead to verifiable sustainability reporting the sheer volume of these management solutions will eliminate the opportunity for any one to emerge as the standard.

Without a standard technology, each firm will need to commit significant resources to establishing their TBL accounting and reporting infrastructure and producing the annual sustainability report itself. This leads to being stuck in a rut for several reasons. First, though a significant number of the

<sup>6</sup> Alcoa 2003 Sustainability Report, page 6

<sup>7</sup> <http://www.responsiblecare-us.com/about.asp>

largest U.S. firms may have converged on a standard, the lack of an enabling technology will make it nearly impossible for medium to small size firms to accomplish the same level of sustainability reporting. This could eliminate these smaller firms' access to the growing number of socially and environmentally responsible investment capital. Second, the proliferation of technologies and management systems will undoubtedly make the auditing of sustainability reports a complex and expensive endeavor. Given the expense, companies will more likely balk at the need for external verification, leading to a proliferation of reports meeting one standard but with little or no assurance on accuracy and comprehensiveness. Finally, given the lack of an enabling technology it seems likely that convergence will fall on a "voluntary" standard and as such different industries will tend to report individually to the same standard. This is already a concern with the GRI. Oil and gas companies, for example, tend to ignore the Biodiversity and Land Use reporting requirements while reporting extensively on philanthropy and community engagement activities. Therefore, despite having a reporting standard, this scenario that does not include an enabling technology does not provide the assurance and consistency necessary to truly actuate the value of sustainability reporting.

### ***Scenario 5: Systems Plug-in Bonanza***

The Systems Plug-in Scenario is likely to happen with the development of standards focused on specific business activities and, at the same time, technology evolving to a level that allows the incorporation of sustainability information into systems such as ERP, HR, CRM, and inventory, or even web-based systems.

The industry-specific standard is a response to the increasing pressure of stakeholders towards the disclosure of specific aspects that only happen within an industry, and which cannot be captured on general reporting indicators. On a longer term, the industry-specific reporting can even pass from this latent/emerging stage to a more institutionalized, or even civil stage, where it becomes either a business practice or is required by law. A current example of this latent/emerging stage is the development of sector-supplements by the GRI, the leading standard used for sustainability reporting, which has so far generated 6 sector supplements – Automotive, Financial Services, Mining and Metals, Public Agency, Tour Operators, and Telecommunications - and has another two supplements under development – Apparel and Footwear, and Logistics and Transportation<sup>8</sup>. Although this indicates a progress toward industry-specific indicators, there is still a lot to be done in this field.

On the technology side, the increasing amount of information and data required, the escalating costs associated with reporting, and the ever-growing complexity of the points under evaluation, creates a market for big software vendors and systems developers, such as SAP, IBM, Siebel, and Oracle/Peoplesoft, who may profit from automatic tools that can be customized to the very specific report need of each industry. An example of this intensive use of technology applied to specific segments is the comparison feature to be incorporated into the GRI G3 Guidelines currently under development. It consists of a web-based tool that can retrieve data for companies, thus allowing easy comparison – given the fact that the vast majority of the companies that publish sustainability report, do it through a PDF file available on their website, any comparison requires a huge amount of manual work to collect data and re-enter it into a system. The figure below presents a proposal for such a system.

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<sup>8</sup> <http://www.globalreporting.org/guidelines/sectors.asp>

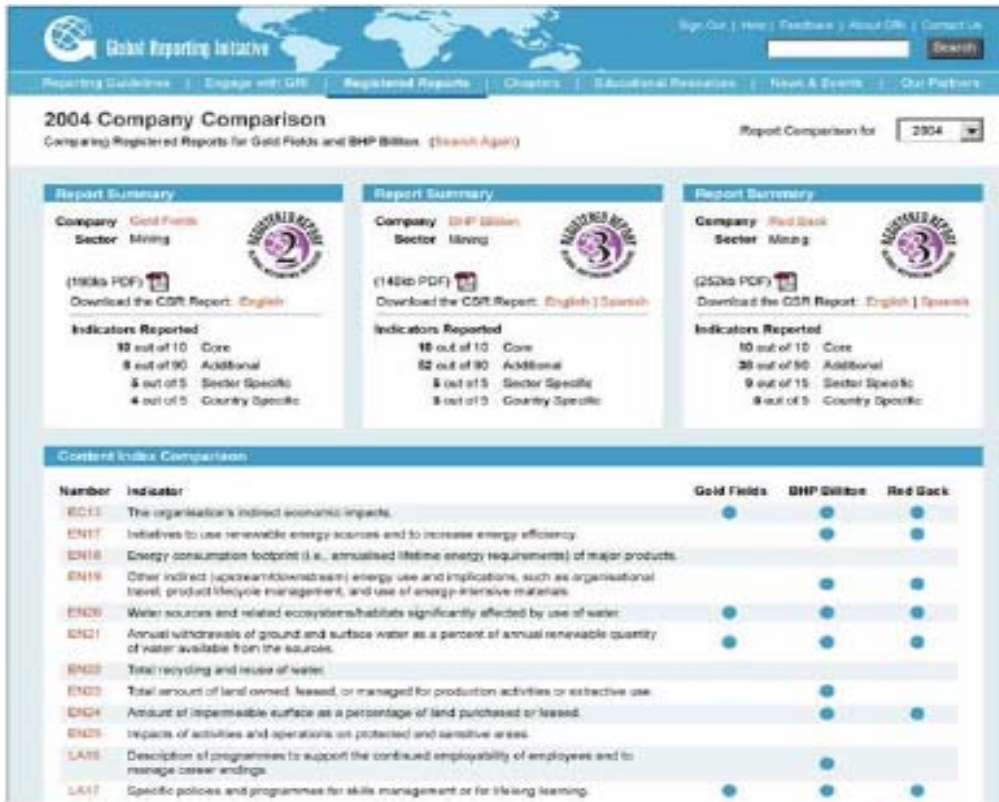


Figure 2: Proposed GRI G3 Comparison Feature

Vendor systems and web-based tools might well co-exist, as a more robust in-home system may allow the sustainability to be easily incorporated into the management decisions, through the use of planning tools, internal periodic reports, etc, thus allowing managers to redefine its actions towards the company goals. On the other hand, a web-based approach will be more likely used for comparison and external reporting.

Given the above presented discussion, this scenario encompasses an opportunity for companies that envision sustainability as part of their business strategy, going beyond the often defensive/compliance response. Moreover, when seen from a short-term perspective, the adoption of more complete and sophisticated reports may be understood as a cost of doing business which, in fact, in a medium-long term leads to higher gains through better managerial practices and enhanced company reputation.

**Scenario 6: A Good Day for Auditors**

The final scenario implies that a single standard has emerged with the complementary technology tools in place. This is the point where outside stakeholders, industry standards and the legal standards converge. The emergence of this scenario follows a similar path as financial reporting standards. Initially, accountants were created to aid the courts in their investigation of matters in accountancy. But in the beginning accountants were hired by corporate management, and thus their efforts were directed at making management look good instead of serving the public good. Eventually scandals and inconsistency of accounting practices creating a demand for a public accountant that independently audited a standard set of financial criteria.

Sustainability reporting follows a similar life cycle. Various methods of reporting and accountability will converge once the shift to serving the public good becomes essential. At this point, the demand necessitates a new breed of auditors. Just as audited financial reports became a requirement for the

SEC, audited sustainability reports would be required as well. The process falls under the management of the top financial officer in an organization and the reports are used throughout as a strategic tool.

As a result of this type of standardized, auditable reporting, the proliferation of socially responsible investment funds that started in the nineties and early 21st century will begin to decline. The demand for this type of niche investment filter will no longer be needed as analysts and investors alike will have a common form of evaluation. Sustainability reporting will transform and balance the short-term erratic business towards a more long term view. Price/earnings, social/earnings, environment/earnings ratios are the trifocal of company evaluation, and triple bottom line Analysis becomes the norm. See the graphic below for a standard Key Statistics Snapshot.

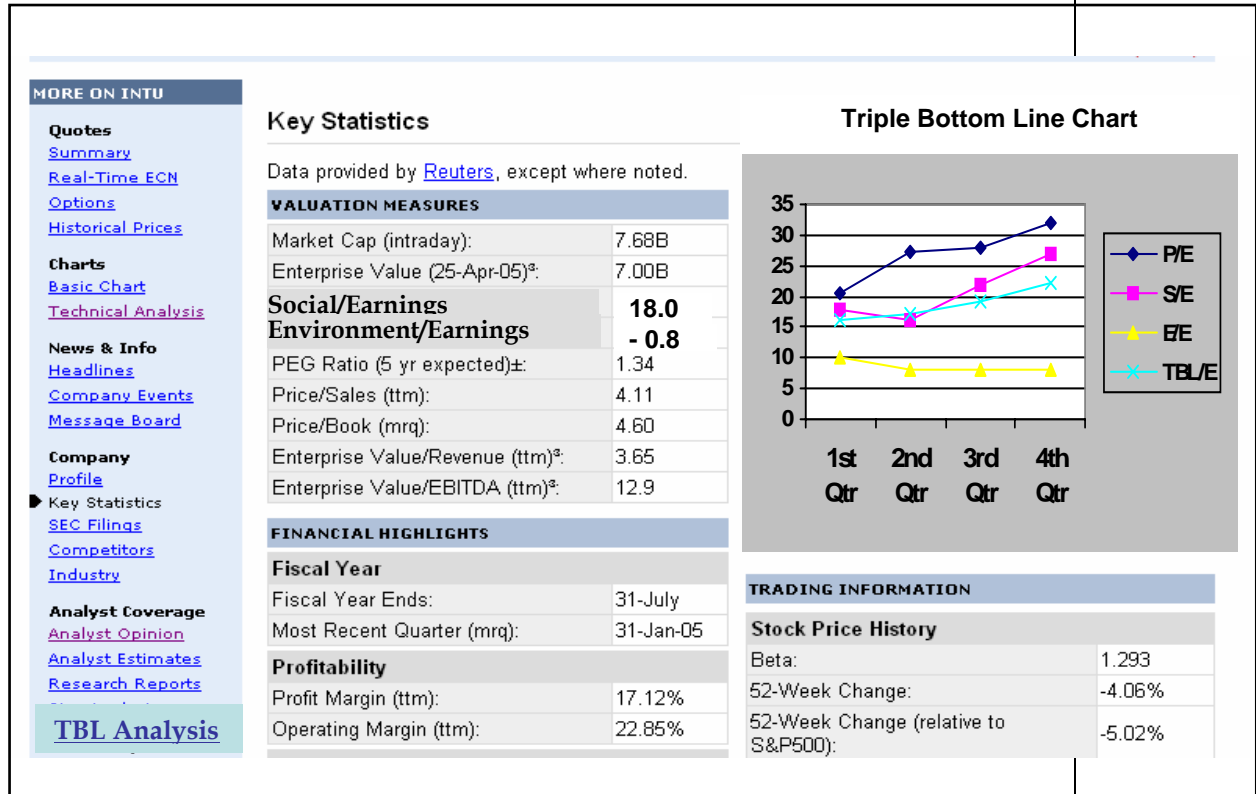


Figure 3: A Key Statistics Snapshot<sup>9</sup>

The transparency that emerges with the sustainability standards creates a more informed consumer market. Similar to the shift in consumer power that arose with the Internet, consumers will be even more integral to the activities of an organization. The ability to evaluate a product or service across several dimensions creates even more consumer power.

Finally, there is going to be an opportunity for a new line of independent auditing firms. This will require a more robust set of evaluation skills which in turn will fuel educational and certification standards, much like the CPA or CFA. The biggest winner in this scenario is the independent auditor who creates the best practices around auditing. The potential losers in this scenario are the niche SRI firms, consultants and homegrown software add-ins. The key to the success of this outcome is the process or technology innovation that will emerge to enable and facilitate TBL reporting.

<sup>9</sup> Figure adapted from <http://finance.yahoo.com>.

## 4. Digital Innovation in Sustainability Reporting: XBRL

“The annual report of the 21st century will not be annual and it will not be a report: it will be an up to date informative, permanent dialogue” - Alan Benjamin (IACW).<sup>10</sup> Trends in reporting indicate that stakeholders are demanding more detailed information and that too more frequently. That poses a huge challenge for the reporting companies. We believe that XBRL is a solution to this changing paradigm of reporting. No matter what scenario we end up in five years from now, adopting technological innovations such as XBRL will give companies a clear competitive advantage, not just in terms of developing sustainability reports but realizing real value out of the reporting process by better integrating business information with management processes and tools.

### *What is XBRL?*

In its current form, developing sustainability reports is a very time-consuming, costly, error-prone, and a complex process. Moreover, the utility of these reports is very limited to the organization internally, as the information and data captured in the reports is not directly and automatically linked to the management processes and systems of the organization. It is also of limited utility for external stakeholders because usually these reports are generic in nature and do not address specific needs of each of the different stakeholders. Current formats in which financial as well as non-financial data is reported and exchanged includes: PDF, HTML, Microsoft Excel spreadsheets, text files etc. These formats are only as good as paper copies, when it comes to sharing such information across diverse platforms and applications.

XBRL (eXtensible Business Reporting Language) seems to provide a solution to all of the shortcomings mentioned above. XBRL provides a standard and automatic way of exchanging, storing, and managing business information electronically, across all software platforms and technologies. It is one of a family of "XML" languages which is becoming a standard means of communicating information within a corporation as well as between businesses on the Internet. XBRL is being developed by an international non-profit consortium of approximately 250 major companies, organizations and government agencies. It is an open standard, free of license fees.

### *Benefits of XBRL*

XBRL offers following key benefits:

1. Uniform and universal interpretation of business data and information
2. Better controllability of the business information
3. Open standard means seamless integration and more scope for innovation
4. Better efficiency and reliability in the collection, processing, analysis and communication of business information. One can instantly find the business data needed. Effortless aggregation of complex data coming from various sources is possible.
5. Flexibility and Speed: Digitized reports can be translated almost instantly into any output format or media - web, html, PDF, PDA (handheld devices) etc. You can also create mini reports or combine reports almost effortlessly, depending on the type of audience you want to target. Re-use of information in different formats does not require re-keying of the data. These reports can then be easily linked to financial markets as NASDAQ and EDGAR are already using XBRL. SEC has adopted rules for reporting financial information using XBRL. Adopting XBRL will mean that reports can be read and used by a broader range of stakeholders.
6. More internal transparency for better alignment of the organization. It better links reporting and business information to management tools, systems and management decision making.
7. Easy comparability and use of reports for benchmarking, auditing, and assurance
8. Enhanced analysis, modeling, and forecasting. Better investment decisions can be made.

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<sup>10</sup> KPMG International Survey of Corporate Sustainability Reporting. 2002, p. 14.

9. Ease and speed of changing and updating information. This is especially important in view of Sarbanes Oxley etc
10. Increasing demands for more and accurate information can be easily satisfied
11. Cost reduction. You can create once and publish in a variety of different formats, remove process complexity as well as the risk of errors.
12. Standardization and innovation can go hand-in-hand. Use of XBRL will standardize the process of reporting, not the contents of the reports.
13. Real time business monitoring by providing "live" information: continuous auditing, balanced scorecard, stakeholder communication, daily balance sheet, better availability and use of business intelligence
14. Data can be requested from, and delivered right into, desktop analytical software, inside or outside of the organization
15. Ease of use and almost no training required for people to use it. Once the company has XBRL-enabled software applications, the data entry and retrieval process is seamless, as far as the users are concerned.

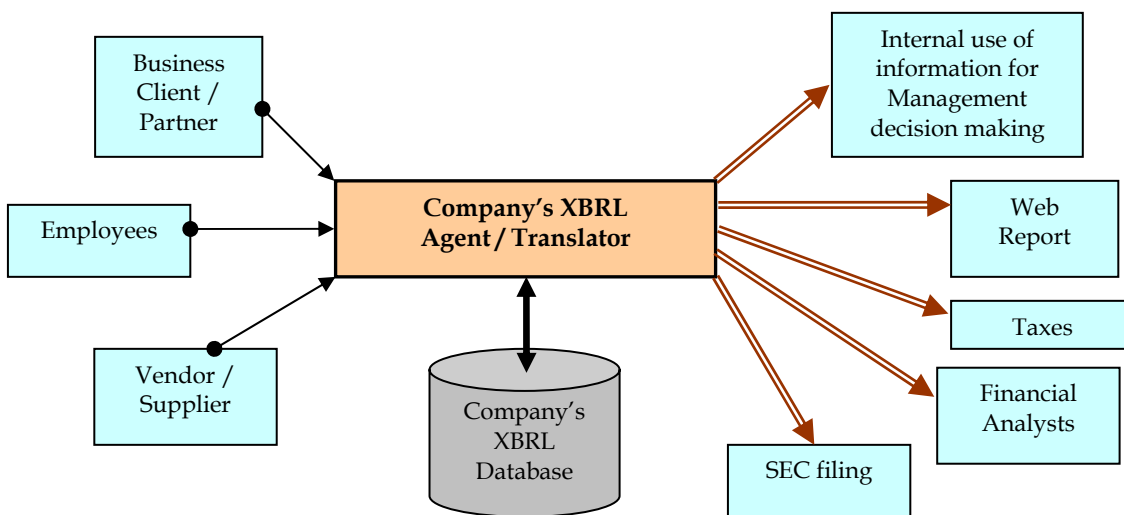
#### XBRL and Web Services

XBRL is ideal for use in Web services. Web services are Internet-based pieces of software or applications that interact with other applications or software components on the Internet to share data and invoke actions remotely. In this sense, Web Services can be used to automate internal as well as external business processes over the Internet. Since Web services are based on the XML open standard, they can use XBRL very easily.

#### *How does it work?*

The whole idea of XBRL is to digitize the data (business information) in a format that can be understood, interpreted and exchanged seamlessly. Digital information can be understood by computers, turned into a report that makes sense for humans and can be transmitted effortlessly for wider audience. It brings automation to the reporting process.

Raw data needs to be converted so that XBRL-enabled applications can utilize the information. XBRL "tags" the raw data, which gives meaning (context) to the information (data). Once we convert the data into XBRL format, it can be used in any XBRL-enabled software program or application. Between applications, this import/export function can be automated and is transparent to the user.



**Figure 4: XBRL data seamlessly exchanged over the Internet**

Note: XBRL Translator can send data or reports to the various stakeholders (on the right) either in XBRL format or in traditional formats such as HTML, PDF etc. In the former case, the recipients need to have XBRL-enabled software applications (ERP or financial/reporting packages) to interpret that data.

**There are three components of XBRL as explained below:**

- **Taxonomy:** Taxonomy describes the metadata. In other words, it defines rules for defining tags for the data. Tagging individual financial facts transforms the information into digital media. Taxonomies establish agreements between different parties (who are likely to use the document or data) on tagging and contextual usage of data items in the document. Taxonomy includes the reporting elements as well as relationships between these elements. Examples of taxonomies include: GAAP, customized (company specific) etc.
- **Schema:** Schemas specify the valid tags and the valid structure of a document. Schema decides how the document will be used and interpreted.
- **XBRL Instance Document:** It is the actual document or message that is sent across in order to exchange the information. It is the XML (XBRL is based on XML open standard) message that delivers the data.

*Who is using it today?*

GRI is planning to fully adopt XBRL in its G3 guidelines, scheduled to be out in 2006. XBRL is also starting to gain widespread adoption in accounting, software, regulatory and industrial sectors. For example, it is supported by: the big accounting firms (Pricewaterhouse Coopers, KPMG, E&Y etc), Investment Banks (Morgan Stanley, JP Morgan, Deutsche Bank etc), Regulators (NASDAQ, Börse, ASX), Governments, and Software giants (SAP, Oracle, Microsoft, Semansys).<sup>11</sup>

## **5. Conclusion**

XBRL technology has already started delivering on its promises. A wide array of XBRL-enabled solutions exist or are under development today. Some of these solutions include: investor analysis products, EDGAR and other government filing solutions, ERP solutions, business intelligence solutions, Web services, and enterprise wide reporting and analysis software packages.

No matter which scenario we end up with in the years ahead, XBRL can add value, and in fact can mitigate the variance in the type and density of data reported from one scenario to another. Using XBRL, one can output, display and transmit information selectively and very easily, depending on the requirements of the reporting standard or guidelines in question. Another advantage is that XBRL is based on an open standard. Widespread use and adoption of XBRL in recent years indicates the nature of things to come and companies just cannot afford to be left behind in the coming age of digital reporting.

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<sup>11</sup> Ibid.

## APPENDIX:

### Sources of Information about XBRL

1. Digital Reporting: <http://www.de-haas.nl/Digital%20Reporting/xbrl.htm>
2. The Next Technology Revolution XML → XBRL: [http://web.bryant.edu/~xbrl/XML-XBRL\\_Pt1.ppt](http://web.bryant.edu/~xbrl/XML-XBRL_Pt1.ppt)
3. Semansys: EMU en XBRL: [www.cbs.nl/nl/service/ondernemers/decentrale-overheid/kredo/xbrl/Kredo\\_XBRL\\_Presentatie\\_Semansys\\_1\\_030829.ppt](http://www.cbs.nl/nl/service/ondernemers/decentrale-overheid/kredo/xbrl/Kredo_XBRL_Presentatie_Semansys_1_030829.ppt)
4. The challenge of XBRL: business reporting for the investor  
[http://www.pwcglobal.com/Extweb/service.nsf/docid/D8BEAA7056E6D7CC85256BF005786A9/\\$file/pwc\\_balsheet.pdf](http://www.pwcglobal.com/Extweb/service.nsf/docid/D8BEAA7056E6D7CC85256BF005786A9/$file/pwc_balsheet.pdf)
5. XBRL International: <http://www.xbrl.org/>
6. Understanding the XML Standard for Business Reporting and Finance:  
<http://www.xbrl.org/Business/General/SoftwareAG-CaseForXBRL.pdf>
7. On the Reporting path - determining new directions with G3:  
[http://www.sustdev.org/index.php?option=com\\_docman&task=doc\\_download&gid=31&mode=view](http://www.sustdev.org/index.php?option=com_docman&task=doc_download&gid=31&mode=view)