STRATEGIC OPPORTUNITIES IN THE CORPORATE SUSTAINABILITY REPORTING MARKET FOR A SPECIALIZED SOFTWARE FIRM

by

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ABSTRACT

Companies preparing sustainability reports face many challenges, including the management of increasing amounts of data as well as the effective communication of non-financial information to stakeholders. A new category of performance management and reporting software is emerging in an effort to help companies address these challenges.

The original mandate of the project was to identify industries for which a particular sustainability reporting solution was a good fit, based on the specific needs of each industry. Fourteen corporate reporters from six different industries were interviewed to better understand the key problems faced by individuals who prepare sustainability reports. Responses to interview questions indicated that firm size rather than industry sector was more likely to determine fit. The project provides recommendations on how the software firm that produced this particular solution can approach the corporate market, based on the strengths of its solution and key opportunities identified through research and the interviews.

Keywords: corporate sustainability; sustainability reporting; sustainability performance; sustainability software; performance measurement

Subject Terms:
Sustainable development reporting
Social responsibility of business
Sustainable development
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EXECUTIVE SUMMARY

Sustainability reporting has become an item on the agenda of a growing number of corporations around the world. As pressure from internal and external stakeholders is increasing for greater transparency, credibility and information quality, so is the number of challenges faced by individuals involved in preparing non-financial reports.

This research project identifies opportunities in the corporate market for the sustainability reporting tool of a small Vancouver-based startup called Visible Strategies. The original mandate of the project was to identify industries for which the Visible Strategies' product was a good fit, based on the specific needs of each industry. Fourteen companies with existing non-financial reports were interviewed and asked to describe their current reporting process. The companies were also asked about their knowledge of tools that could help them with the task of preparing a non-financial report.

The main findings of this project are that:

- Across industries, large corporate reporters face similar challenges when preparing non-financial reports.
- The key challenges include managing increasing amounts of data, addressing the needs of different stakeholders, coordinating data collection between sites and with data owners, and setting measurable, long-term goals related to sustainability programs.
- Other challenges include improving online communication, developing numeric indicators for social initiatives, publishing updates in real-time and dealing with limited resources.

- Individuals who prepare non-financial reports typically use basic office software to compile data and write content. Very few have secured a budget to install a comprehensive solution to help address key challenges.
- A new market is emerging for sustainability performance management (SPM) software. Currently, the market is dominated by small, niche vendors, but large business software vendors are starting to pay attention.
- Visible Strategies' tool *see-it*™ was found to be a good choice for communicating a corporate sustainability strategy to the general public. The tool was however seen as being limited in its data management capabilities and by its web-only output.
- Visible Strategies can take advantage of the growing trend in corporate non-financial reporting by focusing on small and medium size enterprises (SMEs), partnering with a complementary data management solution to offer a whole product solution and better integrating the dominating reporting standard from the Global Reporting Initiative (GRI).

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1: INTRODUCTION

The past few years have seen a growing interest from corporations in the communication of non-financial information to internal and external stakeholders. Initially consisting of a few pages or sections in the annual report, non-financial information is often today presented in comprehensive, glossy sustainability or corporate social responsibility (CSR) reports, using visuals that mimic the graphical presentation of the annual report. (Craib Design & Communications, 2007) In addition, companies also dedicate entire sections of their corporate web site to environmental and social initiatives.

The majority of the information disclosed for these corporate sustainability initiatives is not required. Companies operating in sectors where the environmental and social impacts of operations have become increasingly visible to the general public are responding to the pressure from non-governmental organization (NGOs) and special interest groups for greater transparency. The Internet makes information about corporate operations available to anyone across the world, almost instantly, no matter where these operations are located. As John Elkington wrote in *Cannibals with Forks*, "business increasingly operates in a 'goldfish bowl'." (Elkington, 1998)

The latest non-financial reports are read by sophisticated audiences that no longer accept vague statements on policies. Today, managers of socially responsible funds, investors, bankers and insurance providers review sustainability and CSR reports to decide whether or not they will invest in a company, lend the company funds at a preferable rate, or renew the company's insurance policy. Not only do these professional

audiences expect numeric data to reinforce claims made in the non-financial report, but they also compare the numbers against data from past years and data from similar corporations.

With this in mind, current reporters struggle with an increasing amount of non-financial information, some of it previously never tracked. For large corporations, this information can come from hundreds of data owners located around the world who, in some cases, are tracking the information using different systems.

1.1 Project Overview

The purpose of this project is to identify the needs of current non-financial corporate reporters and review the challenges faced by individuals tasked with collecting the information required for a non-financial report. Then, the project attempts to match these needs and challenges with the specific capabilities of the sustainability performance management (SPM) and reporting solution developed by a vendor called Visible Strategies. At the request of Visible Strategies, the project focuses on industries in which companies are likely to have established sustainability programs and to prepare a comprehensive non-financial report.

The remainder of **chapter 1** serves as an introduction of Visible Strategies and their SPM solution, as well as an overview of some strategic challenges currently faced by this vendor.

Chapter 2 clarifies the terminology used in this project and provides an overview of current non-financial reporting standards. The chapter also reviews the history of SPM

reporting by corporations, the state of SPM reporting in 2007 and some of the challenges faced by non-financial reporters, as identified by a review of the literature.

Six industries in which a significant proportion of companies prepare non-financial reports are then described in **chapter 3**.

Visible Strategies not being the only SPM vendor, **chapter 4** lists some of the other SPM solutions available to corporate reporters. The chapter also provides an overview of challenges faced by SPM tool vendors as well as a profile of this emerging technology.

Chapter 5 describes the findings based on 14 interviews conducted for this project with non-financial corporate reporters. The chapter profiles these reporters and highlights the most-common challenges identified by individuals involved in preparing non-financial reports.

Based on the competitive landscape described in chapter 4 and the needs and challenges identified by interviewees in chapter 5, **chapter 6** analyzes the strengths, weaknesses of the Visible Strategies solutions, and presents both opportunities and threats the company should keep in mind.

Finally, **chapter 7** presents recommendations to Visible Strategies based on the findings of this project and concludes by identifying some additional areas of focus for future projects.

1.2 Visible Strategies and see-it

This section introduces Visible Strategies and some of the key individuals involved in the company, and then provides a brief overview of the company's SPM

reporting tool *see-it*™. Then, the section looks into the company's current customers, business partners and revenue model.

1.2.1 Company Overview

Visible Strategies is a consulting firm that also develops sustainability performance management (SPM) software. Visible Strategies is located in Vancouver, Canada, and was founded in 2002 by Colin Grant. The company was originally named Real Living Solutions and adopted its current name in 2007.

Colin Grant is the founder of Visible Strategies and the company's CEO. He has been involved in sustainability for the past 15 years and is a well-known speaker on the subject. Mr Grant is a Board Member of the International Centre for Sustainable Cities, a member of the Vancouver Mayor's Sustainability Council, as well as a member of the Vancouver Climate Leaders' Group. He is a native of Scotland.

Boyd Cohen is the cofounder of Visible Strategies and the company's Vice President of Business Development. He joined the company in 2005. Before he joined Visible Strategies, Mr Cohen played a role in other sustainability for-profit or non-profit organizations. Boyd Cohen also does teaching and consulting engagements on sustainable development and sustainable entrepreneurship in North America, Latin America and Europe. Originally from the United States, Mr Cohen has a Ph.D. in strategy, entrepreneurship and sustainability from the University of Colorado.

Visible Strategies employs ten staff and does all its software development in-house.

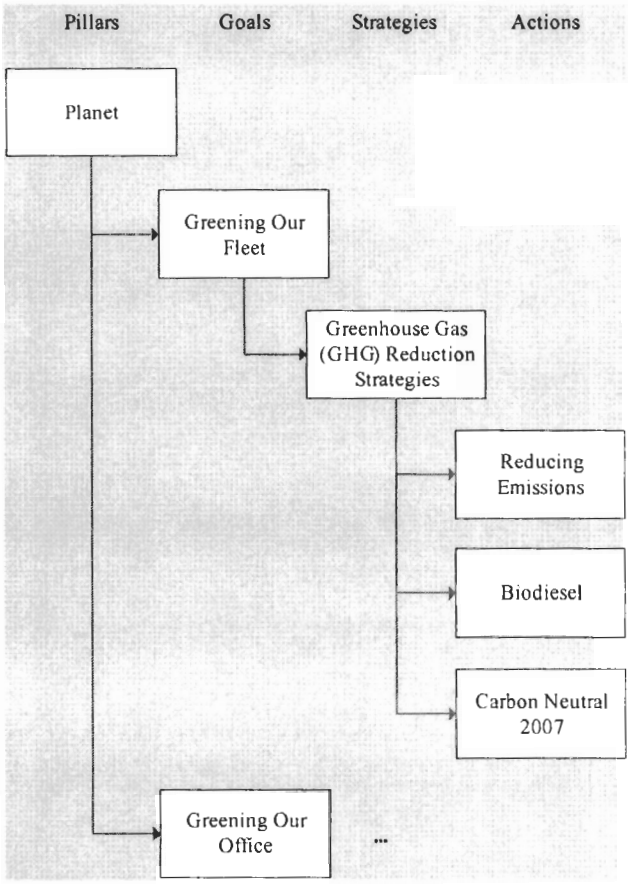
1.2.2 SPM Software

Visible Strategies's SPM solution is *see-it*, a web-based sustainability dashboard that can be integrated into a company's web site to communicate information about its sustainability programs. The software is hosted by Visible Strategies and can be accessed anywhere an Internet connection is available.

The key features of *see-it* include its graphical interface that lets visitors drill down to the information in which they are interested. At the highest level, the interface typically groups goals against the triple-bottom line: people, planet and profit (these are the "pillars"). Under each goal are listed key strategies (for example, employee wellness or greenhouse gas emission reduction). Then, specific actions are linked to the key strategies. Finally, each action is represented by a scorecard with key performance indicators (KPIs), measured over time against set targets. The company using *see-it* can also include descriptive information such as target statements, status reports and general information about individual actions.

Figure 1-1 illustrates the hierarchy of information presented in *see-it* and uses the Novex Couriers implementation to provide examples at each level (http://www.novex.ca/online-order-login/2.html).

Figure 1-1 Information Hierarchy in see-it



Actions identified in *see-it* are assigned owners within the company and a feedback area lets visitors comment about what they have seen. This feedback mechanism can help the company respond to the concerns of visitors.

The *see-it* interface is developed using a backend manager where pillars, goals, strategies and actions are defined. The backend manager is also where data for the different KPIs is captured, as well as additional information about each action (can include text, links to other sites or areas in the site, and PDF documents). Another key feature of *see-it* is its ease of use: the backend manager includes text fields, pull-down menus and a spreadsheet-like interface to enter the data. As information is entered in the backend manager, the final graphic output is generated on the fly.

The software lets a company control what information is published in the graphical interface and what information stays private, available to internal users who might want to review metrics for performance management. Multiple user accounts can co-exist, each with different levels of access to the backend manager (for example, one administrator user might be the individual tasked with collating all the sustainability data across the organization, while a local data owner might only be allowed to enter and edit the information for one of the company's sites).

Visible Strategies can help a company build its sustainability strategy and *see-it* site through its consulting services. The Visible Strategies consultants can provide assistance with initial research, integration with other systems and customization of the *see-it* software.

1.2.3 Customers

Visible Strategies has sold *see-it* to cities, governments, NGOs and corporations. Its current customer base is mainly located on the North American West Coast. Corporate customers are all located in British-Columbia and include Novex Couriers, Bosa Properties and Dockside Green.

In July 2007, *see-it* was used by the organizers of Live Earth to compare the environmental impact of events hosted in eight cities across the world. Cities were compared on energy used, transportation to and from the event, and waste (diverted and sent to landfills).

1.2.4 Partners

Because Visible Strategies is a small firm, it developed several partnerships to increase its visibility and capacity for customer engagements. Visible Strategies partners with several consulting firms specialized in sustainability and stakeholder engagements. Partners are resellers of *see-it*, as well as consulting and service providers for Visible Strategies.

1.2.5 Revenue Model

Visible Strategies generates revenue through the initial sale of the software *see-it*, through yearly hosting fees, and through consulting services. Currently, 60% of the company's revenue comes from software sales and hosting, and 40% comes from consulting fees. To date, the company has not made any sales through its reseller partners.

1.3 Strategic Challenges

Visible Strategies has mostly gained recognition and visibility within municipalities and governments. The company's current corporate portfolio is small and limited to corporations in British-Columbia, Canada.

In recent months, Visible Strategies has been contacted by various companies for information about its software. The corporate market could potentially represent an area of growth for Visible Strategies. However, because of its small size, Visible Strategies is not in a position to embark in several lengthy engagements which require hours of consulting. The company wants to focus its initial effort on corporate customers that

already have a sustainability strategy in place and are looking into better ways to communicate this strategy and their progress to stakeholders.

Visible Strategies also has a limited sales staff and wanted to identify industries on which these sales resources should focus their efforts. This research project was initiated to look into current reporting industries and identify industry-specific needs that could be served by a solution such as *see-it*.

Visible Strategies also faces a challenge in marketing its solution because of the recent renaming of the company. Fortunately, the main brand of the company, which is the name of its software, hasn't change and has always been predominantly visible in all implementations.

2: SUSTAINABILITY PERFORMANCE MANAGEMENT (SPM) REPORTING

The purpose of this section is to review the definition and scope of sustainability performance management (SPM) reporting and to explain the terminology selected for the project. In addition, this section discusses the history of SPM reporting by corporations and presents a brief overview of reporting standards gaining acceptance within the corporate community. Then, recent trends in SPM reporting by corporations in Canada and around the world are examined. Finally, this section highlights some of the projections being made about SPM reporting by corporations.

2.1 SPM Reporting Overview

In addition to providing information on their quarterly and/or annual financial performance, many companies today are also publishing details about non-financial activities such as community involvement, environmental impact, and social programs. This information is published within the annual financial report itself, or as a separate report. Companies use a variety of terms to identify their non-financial reports:

- Sustainability Report
- Corporate Social Responsibility Report
- Accountability Report
- Corporate Responsibility Report
- Sustainable Development Report

Some of the earlier attempts at non-financial reporting, initially applauded by stakeholders, quickly backfired when it was discovered that the companies had not

changed their normal operations and published sustainability reports mainly as a public relations exercise. Enron was one of the first major companies to publish a triple-bottom line (3BL) report. The company's Code of Ethics promoted values such as respect, communication and integrity. (Sims & Brinkmann, 2003; Reich, 2007) When the company's downfall revealed a culture of corruption and deceit, stakeholders and scholars alike were forced to take a critical look at the information published in non-financial reports. (Kallio, 2007)

Companies were then pressured into being more transparent about and accountable for the information in their non-financial reports, just as they would be when reporting financial information. Stakeholders were no longer happy with objectives and standalone metrics, but started demanding numerical data that could be compared from one year to the other, and external verification of the information published. (Caby & Chousa, 2006) Non-financial reporting needed to reflect the company's integration of sustainability into its day-to-day operations, as well as the company's progress on its programs.

Although non-financial reports are not controlled by the same regulatory requirements as financial reports, unfounded claims a company makes can end up seriously damaging its brand and reputation. (Igalens, 2006)

The integration of sustainability into operations and the monitoring of performance with regards to non-financial indicators are generally referred to as "sustainability performance management" (SPM). The Caiteur Group has defined SPM as:

> ... the decision-support infrastructure of processes, governance, data and reporting systems needed to monitor, manage, and improve the economic, social and environmental performance of the enterprise. (Caiteur Group, 2007)

"SPM reporting" refers to all the data mining, data analysis and publication activities performed by companies with the objective of measuring and communicating progress on sustainability initiatives to internal and external stakeholders. These specific activities within non-financial reporting are the focus of this report as they could justify the investment in a performance management software package such as Visible Strategies' *see-it*.

In some publications, the term corporate sustainability reporting (CSR) is also used to refer to these activities. (Labelle, Schatt & Sinclair-Desgagné, 2006; Stratos, 2005) However, the use of a term that is denoted by the same acronym as corporate social responsibility (CSR) can lead to confusion. The assessment of which term is more appropriate extends beyond the scope of this analysis; however, the author has elected to use SPM reporting for the purpose of this project.

2.2 History

Until the late '80s, companies would prepare reports on their environmental or social compliance for government agencies and, if this information was requested by a concerned party, it could be made available. However, rarely was this information volunteered to the general public. Following the Exxon Valdez oil spill in Alaska in 1989, a group of environmentalists and other interest groups published the Valdez Principles. (Sanyal & Neves, 1991) Two of the ten principles (Disclosure, Assessment and Annual Audit) were a first attempt by stakeholders to encourage companies to report

publicly on non-financial indicators. The Valdez Principles, later renamed CERES Principles (for the Coalition of Environmentally Responsible Economies), were endorsed for the first time in 1993 by a Fortune 500 company, Sunoco. ("Ceres Principles", n.d.)

In the mid 1990s, the term "triple-bottom line" (3BL) was introduced to refer to the need for corporations to measure their success not only by their financial performance, but also by their social and environmental performance. (Norman & MacDonald, 2004) A company's non-financial report was no longer acceptable as a simple public relations exercise and was expected to answer the questions of a growing body of stakeholders. (Stratos Inc., 2005)

With these new expectations came the realization that guidance was needed concerning non-financial reporting. CERES, the same group that initially published the Valdez Principles, created the Global Reporting Initiative (GRI) to look into developing a framework for sustainability reporting. In 2000, the GRI released its first Sustainability Reporting Guidelines, which have since gone through two major iterations. Today, the GRI is independent from CERES and the third generation of its guidelines (G3) are used to prepare sustainability reports in over 850 companies. ("GRI Portal – Our History", n.d.)

There is a limited number of countries where companies are required to report on non-financial indicators (and in some cases, only certain companies face this obligation): France, Denmark, Norway, The Netherlands and Sweden. (Dubigeon, 2006) However, even without mandatory reporting regulation, there is increasing pressure for companies, especially when they are large and publicly-traded, to publish comprehensive reports on their non-financial performance. Company directors are held accountable for managing

not only financial risks, but also social and environmental risks that could threaten a company's ability to run its operations. (SustainAbility, 2001) If a company wants to seek funding from the International Finance Corporation (IFC) for a project in a developing country, it must meet the IFC's Environmental and Social standards. These standards include requirements to disclose information. (IFC, 2007)

Standards for socially responsible investment (SRI) are being adopted by institutional investors (Sparkes & Cowton, 2004) and SRI assets in the United States alone have grown 258% since 1995 to represent 2.29 trillion investment dollars in 2005. (Social Investment Forum, 2006) Indices like the Dow Jones Sustainability Index (DJSI) and FTSE4Good screen companies based on their non-financial reporting, as do responsible investment rating agencies such as Jantzi in Canada and Total Social Impact in the United States. (Laszlo, 2005) Finally, a growing body of consumers is taking into account a company's social responsibility when deciding about purchasing its products and services. (Dawkins & Lewis, 2003)

2.3 Standards

Sustainability reporting standards have recently emerged, in an attempt to bring non-financial reporting to the same level of rigor as financial reporting. Because of its voluntary nature and the lack of clear guidelines, early non-financial reporting was seen as an inconsistent and inconclusive exercise.

> The current reality is that companies can undertake their social and environmental audits in any way they wish, publish as much or as little of what they learn as they wish, and use whatever format suits them. (Waddock, 2006)

One such standard is G3 from the GRI. The GRI G3 reporting guidelines, released in October 2006, include principles on how to define the content of a sustainability report and how to ensure reporting quality. The guidelines list indicators that can be used by companies to prepare their report and also let reporters indicate the level to which they have followed the guidelines (this is new for the third generation of the guidelines). The GRI also publishes sector supplements that can be used in addition to generic guidelines to reflect the unique operations and needs of industries.

A standard on assurance and stakeholder engagements has also emerged: the AA1000 framework from the UK consulting firm AccountAbility. The AA1000 Assurance Standard (AA1000AS), published in 2003, is meant to guide companies in their effort to have their non-financial information verified by a third-party (sustainability auditor). The AA1000 Stakeholder Engagement Standard (AA1000SES) is intended to increase the transparency of reporting by formalizing stakeholder engagements. (AccountAbility, 2003 & 2005)

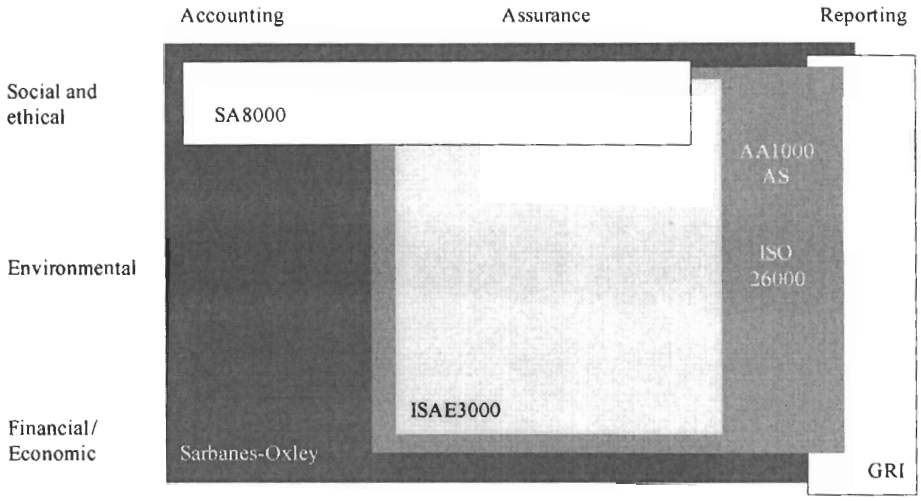
Both the G3 and AA1000 standards are voluntary. Another voluntary guidance standard by the Internal Organization for Standardization is under development and is expected to be published as ISO 26000, in 2009. ("ISO Social Responsibility", 2006)

If a non-financial report is to be assured by a certified accountant (Certified General Accountant or CGA in Canada, Certified Public Accountant or CPA in the United States), the IAASB's International Standard on Assurance Engagements (ISAE) 3000 standard must be followed. According to research done by Accountability and KPMG, the combination of AA1000 and ISAE3000 for an assurance engagement can

deliver enhanced results, the two standards being complimentary. (Iansen-Rogers & Oelschlaegel, 2005)

Some standards also provide guidelines for specific aspects of sustainability. For example, the international standard SA8000 from Social Accountability International addresses human rights and fair workplace conditions. ("Overview of SA8000", n.d.)

Figure 2-1 How Standards Relate to Each Other



Based on WBCSD standard map (WBCSD, 2004)

2.4 Current Trends in Corporate SPM Reporting

The recent years have seen an increase in the number of companies reporting on their sustainability performance as executives start linking sustainability programs and increased profitability. (Grant Thornton, 2007)

2.4.1 In Canada

There has been an increase in SPM reporting by companies listed on the Toronto Stock Exchange (TSX), from 35% in 2001 to 60% in 2003, and then 70 % in 2005. Of

the companies listed on the TSX in 2005, 25% published a separate report while 45% included non-financial information in their annual report. (Stratos Inc, 2005)

The Canadian Securities Administration has required that listed companies disclose whether or not they have adopted a code of conduct and ethics. Companies that have not adopted a code of ethics must justify their decision.

Canadian companies are adopting GRI guidelines in smaller numbers than the rest of the world, 10% compared to 18%. (Stratos Inc., 2005) The highest reporting sector in Canada is the Financial Services industry, likely because of the presence of a requirement for financial institutions with equity in excess of 1 billion (US dollars) to report on their contribution to the Canadian economy and society. (KPMG, 2005)

Globally, Canada ranked third for the number of separate CR reports within G250 (Global Fortune 250 companies) and N100 (Top 100 companies in 16 countries), behind Japan and the UK. (KPMG, 2005)

2.4.2 Internationally

KPMG's survey on corporate responsibility (CR) reporting discovered that 52% of the G250 issued separate CR reports, up from 45% in 2002. These reports have also increased in scope and cover not only environmental issues, but also include social and economic concerns.

The top reporting industry in terms of report prepared is again the financial services sector. Top industries with regards to the percentage of companies preparing sustainability reports include utilities, oil and gas, chemicals, forestry, pulp and paper, and mining. (KPMG, 2005)

2.4.3 Reporting Format

The length of a sustainability report varies between companies and industries, but averages 45 pages. (SustainAbility, 2005) Although companies sometimes provide part or all of their sustainability report as dynamic, web-based content, the typical report is made available in print, or as a downloadable PDF file in which information is static.

2.5 Trends and challenges in SPM Reporting

According to the Caiteur Group, a 20% growth in non-financial reporting is expected in 2007/2008. The Group also expects regulation to replace voluntary standards as governments and accounting bodies get involved in developing consistent and clear guidelines for sustainability reporting. (Caiteur Group, 2007)

The need for regulation has been raised in sustainability research and literature, although some authors argue that there are limits to what can be achieved simply through regulation. (Hess, 2006)

Corporate reporters face many challenges when developing their non-financial reporting strategy. First, they must start reporting on risks related to unsustainable practices and changes external to the company (environmental, social). Today's sustainability reports tend to focus on the positive returns from a company's sustainability initiatives. KPMG reviewed 50 reports and found nine reports where increasing cost of energy and only one report where increasing insurance premiums were identified as risks related to climate change. (KPMG, 2007) Reporters are not identifying environmental and social concerns as risks to their business operations.

Reporters must also avoid limiting themselves to reporting on past performance and start communicating their overall sustainability vision and strategy. In addition to reporting on metrics over the past few years, they should publish objectives and targets to show stakeholders what they are trying to achieve. (Craib Design & Communication, 2007)

Finally, reporters must increase the credibility of their non-financial reports by including first-hand testimonials and case studies involving stakeholders, and seeking assurance on the content of the report by an external party. (Craib Design & Communication, 2007)

3: INDUSTRY VERTICALS

This section describes how industries were short-listed for the purpose of the project and then looks into sustainability performance management (SPM) reporting within these industries. Reporting guidelines are listed for each industry, as well as companies that are recognized as leaders within their industry for their non-financial reporting.

3.1 Industry Selection Process

Six industries were initially targeted for this project, with the objective of interviewing individuals from these industries about their non-financial reporting activities. More information about these interviews can be found in section 5: "Challenges Faced by Corporate Reporters".

Industries were selected based on their presence in surveys on sustainability reporting. Many companies within these industries have already published formal non-financial reports and were better candidates for SPM than non-reporters.

3.2 Industry Verticals and SPM Reporting

All industries are required to report on some of their activities by local government regulations. Non-financial reporting to internal and external stakeholders is always voluntary, even though peer and competitive pressures almost make it an obligation to report on social and environmental impact. Each industry, usually through international or national associations, has developed guidelines to help companies decide

what kind of non-financial activities to include in reports, as well as how to measure the impact of these activities. These guidelines are not considered standards, but best practices that leading reporters help develop and other companies within the industry can follow.

3.2.1 Chemicals

In December 1984, 30 tonnes of toxic methyl isocyanate were released in the community of Bhopal, India and killed thousands of people. The chemical industry's response to this industrial disaster was a program called "Responsible Care". This voluntary initiative challenged chemical companies to improve the health, safety and environmental performance of their products. Today, 52 national chemical industry associations license Responsible Care, including the Canadian Chemical Producer's Association (CCPA) and the American Chemistry Council (ACC), and these associations encourage their members to abide by the principles of Responsible Care. Many chemical companies publish reports in response to Responsible Care. However, there has been much criticism about the program and critics argue that without enforcement and penalties, Responsible Care is nothing but a public relations exercise. (ENDS Report, 2005)

In the United Kingdom, regulation released in June 2007 on Registration, Evaluation and Authorization of Chemicals (REACH) provides a framework of sustainable development for the industry and highlights the need for increased transparency. ("REACHReady Questions and Answers Service", n.d.)

SustainAbility's list of 50 leaders in sustainability reporting includes two chemical companies: PotashCorp (Canada) and DSM (Netherlands). (SustainAbility, 2006)

3.2.2 Financial Services

The financial services industry was challenged to look at the environmental and social impact of projects it was funding. In 2002, a small group of banks in London, in collaboration with the World Bank Groups International Finance Corporation, developed a set of guidelines called "The Equator Principle". ("Frequently Asked Questions about The Equator Principles", n.d.) More than 50 institutions around the world have adopted the principles as a benchmark to manage social and environmental issues in project financing.

Over 160 financial institutions around the world have joined a United Nations Environment Program (UNEP) called Finance Initiative (FI). The UNEP FI and the GRI have joined forces in a working group to develop performance indicators for the financial services industry, captured in a GRI sector supplement. ("UNEP Finance Initiative: Innovative Financing for Sustainability", n.d.)

In Canada, banks, insurance companies as well as trust and loans companies must report in compliance to the Public Accountability Statements regulations. (Stratos, 2005)

SustainAbility's list of 50 leaders in sustainability reporting includes nine financial services companies: Co-Operative Financial Company (UK), Rabobank (Netherlands), ABN AMRO Real (Brazil), ABN AMRO (Netherlands), Westpac Banking

(Australia), Mecu (Australia), BBVA (Spain), Daiwa Securities Group (Japan), Vancity (Canada) and Nedbank Group (South Africa). (SustainAbility, 2006)

3.2.3 Manufacturing

Manufacturing is not so much an industry as it is a group of related industries, all focused on the production of goods. SustainAbility's list of 50 leaders in sustainability reporting includes the following manufacturing-related industries:

- Food producers and processors (Unilever)
- Household goods and textiles (Nike, adidas Group)
- Electronic and electrical equipment (Philips, Sony)
- Information technology hardware (HP)
- Automobile and parts (Ford, Nissan Motor)
- Diversified industrials (General Electric, Suez)
- Personal care and household products (Natura, Henkel)
- Construction and building materials (Lafarge)
- Media and photography (Fuji Photo Film)

The sustainability reporting guidelines for these different industries within manufacturing encourage companies to explain how they address issues such as human rights and labour conditions, total product lifecycle, the production of greener products and the "greening" of production. One example of such guidelines includes the workplace code of conduct from the Fair Labor Association (FLA), to address sweatshop conditions of manufacturing plants in developing countries. (Greathead, 2006)

3.2.4 Mining

The mining industry's operations can have a significant environmental and social impact on the communities where extraction sites are located, as well as globally through

the energy required by mining and smelting operations, the industry's heavy production of greenhouse gas (GHG) emissions, and the use of toxic chemicals to process concentrates. (Dudka & Adriano, 1997) The scrutiny under which the companies operate has encouraged non-financial disclosure and the mining industry is one of the top reporting industries with 50% of companies preparing non-financial reports. (KPMG, 2005)

The GRI publishes a Mining & Metals sector supplement to its reporting guidelines. The supplement was endorsed by the International Council on Mining & Minerals (ICCM) and is used by reporters in the industry. (Deloitte, 2007)

The International Institute for Environmental Development, in collaboration with the World Business Council for Sustainable Development, published a report entitled "Breaking New Ground: Mining, Minerals, and Sustainable Development". The report includes an entire section encouraging mining companies to make non-financial information available to their stakeholders. (IIED & WBCSD, 2002)

SustainAbility's list of 50 leaders in sustainability reporting includes four mining companies: Anglo Platinum (South Africa), BHP Billiton (Australia), Anglo American (UK) and Rio Tinto (UK/Australia). (SustainAbility, 2006)

3.2.5 Oil & Gas

The International Petroleum Industry Environmental Conservation Association (IPIECA) launched a sustainability reporting initiative for the industry and published guidelines on voluntary reporting for oil & gas companies. The guidelines include

environmental, health & safety, social and economic performance indicators that are applicable to the industry. (IPIECA, 2005)

SustainAbility's list of 50 leaders in sustainability reporting includes three oil & gas companies: BP (UK), Shell Group (UK, Netherlands), and Stratoil (Norway). (SustainAbility, 2006)

3.2.6 Telecommunications

In response to the Millennium Development Goals, the Information and Communications Technology (ICT) sector created the Global eSustainability Initiative (GeSI). The initiative has been adopted by 21 members around the world and is working on determining what the industries stakeholders are looking for in non-financial reports. (GeSI, 2005) The GRI also publishes a Telecommunications sector supplement to its reporting guidelines.

SustainAbility's list of 50 leaders in sustainability reporting includes three telecommunications companies: BT (UK), ranked number one in the survey, Vodafone (UK) and Telus (Canada). (SustainAbility, 2006)

4: SPM SOFTWARE

This section draws some parallels between sustainability performance management (SPM) and customer relationship management (CRM) software around adoption and implementation. Then, it reviews some of the challenges faced by SPM software vendors when approaching potential corporate customers. Finally, it describes the different solutions available to companies that are researching tools for sustainability performance management (SPM) reporting and lists six SPM software vendors that were identified during interviews with corporate reporters. More information about these interviews can be found in section 5: "Challenges Faced by Corporate Reporters".

4.1 SPM Software: A Parallel With the Early Days of CRM

SPM software is one of many business intelligence (BI) solutions, along with other enterprise software such as customer relationship management (CRM), enterprise resource planning (ERP) and online analytical processing (OLAP), sometimes simply referred to as "analytics". Systems designed for BI are said to "combine data gathering, data storage, and knowledge management with analytical tools to present complex and competitive information to planners and decision makers." (Negash & Gray, 2003) SPM software, in response to the push for companies to become more transparent, can also be used to present complex information to stakeholders.

As such, SPM software is not a disruptive technology. However, before a company can be sold on the benefits of implementing an SPM system, it must first be

sold on the benefits of implementing SPM. Not all companies pursuing a sustainability agenda have embedded initiatives within their processes and are actively capturing the information they need to track the performance of these initiatives. The company that is adopting SPM is not only investing in technology, but also in communication cycles (to share the SPM vision with internal and external stakeholders), in process review cycles, in implementation and training, as well as in integration with existing systems.

Without such an investment, companies introducing SPM systems into their operations risk running into the same challenges faced by many adopters of CRM software. The business and academic literature on CRM software implementations tells many tales of poor return on investment, frustrated employees, and never-ending implementation projects. (Bull, 2003) The key to successful CRM implementations lied in enterprise-wide, top-down approaches that achieved a balance between customer requirements and the reality of running a business. (Radcliffe, 2001)

SPM software is also likely to be used across many departments in a company: Human Resources, Operations (manufacturing sites, offices), IT, Corporate Communications, Shipping and Receiving, and so on. CRM was a challenge to implement because it required reviewing and reinforcing processes across Sales organizations to ensure that data never or poorly captured before was properly entered into the system. One can then imagine the challenge of implementing a new SPM system across multiple departments in an organization, and across the organization's worldwide locations. The challenge is less about the deployment of technology, as many SPM vendors offer web-based, hosted solutions, but more about the application and enforcement of new or different processes across a wide population in the enterprise.

4.2 Challenges for SPM Software Vendors

SPM software does not benefit from a long track record like other business software such as ERP and customer relationship management (CRM). Because the market for sustainability reporting is still in its early days, vendors face many challenges when they approach potential corporate customers.

4.2.1 Presenting the Business Case for SPM

In *The Sustainability Advantage*, Bob Willard wrote about the need to demonstrate the potential return from sustainable initiatives:

> "One of the reasons that businesses have been slow in getting off the ground with sustainable development is that there is no appropriate business case to quantify the opportunities." (Willard, 2002)

SPM is not different in that software vendors need to be able to demonstrate how companies will benefit from implementing their solution. Early adopters of SPM systems can be considered what Geoffrey Moore calls "visionaries". These are companies and individuals that quickly understood the opportunities that could be created by applying SPM across their organization. To target the market beyond those visionaries, the early majority of adopters called "pragmatists", SPM software vendors need to build a case that presents a compelling reason to adopt SPM and a whole product that can help implement SPM throughout the company. (Moore, 2002)

4.2.2 Displacing Available, Affordable Solutions

Companies interviewed for this project typically identified common office software (spreadsheet, word processor) as their current tools for collecting and analyzing non-financial data, and then preparing their sustainability report. Transformation of this

information into the final report (printed or PDF report, pages on a corporate web site) was mostly done outside the sustainability team, usually by a graphics firm.

A few reasons might explain the use of commonly available, non-specialized software for non-financial reporting. First are the time and resource constraints faced by many sustainability teams. Sustainability reporting efforts, even in large companies, involve one or two dedicated individuals and dozens of specialists who own the raw information for their departments. One individual interviewed for the project mentioned that they had to stop a pilot project with SPM reporting tools because an employee left the team and day-to-day, non-financial reporting activities did not leave any time for the remaining individuals to continue the pilot.

Another reason for using common desktop software is that data for the report comes either from departments that never formally collected information, or from departments that have dedicated, disconnected databases (human resources, environmental management). By capturing the data manually in a spreadsheet or extracting information from the databases into a comma-separated file (.CSV), for example, it is then possible to compile and review the information in a format that is readable by all, including executives.

Although office desktop software has many disadvantages (overhead as data is copied from its original storage location and potential for error when data is captured more than once), its availability and affordability makes it a challenge to displace.

4.2.3 Introducing a New Vendor

One of the key objectives of introducing an SPM software package into the company is to help with the management of information provided by multiple individuals working in different departments. In financial systems, transactions from the entire company are centralized and normalized. However, when a common solution is implemented for all to capture their non-financial transactions, the company is faced with two choices: integrate the new software with existing system, or implement the new software in parallel to existing systems. In companies where no formal data collection system existed, the SPM software can be introduced to set up a formal collection process.

Integrating a commercial, off-the-shelf (COTS) SPM software with existing databases has the benefit of reducing the number of times information is entered and increasing data quality. Unfortunately, such integrations are often plagued with problems because of the lack of compatibility between vendors. (Boehm & Abts, 1999)

On the other hand, if the new system is used in parallel to existing systems, it does little to reduce the data-capture overhead and the potential for error when information from multiple databases is re-entered in the SPM software.

Because of these challenges, companies that have existing systems might look for solutions from vendors they have already implemented. Add-on modules, dashboards and reporting tools that seamlessly integrate with ERP, environmental management systems or health and safety systems are also less likely to require extensive training for end-users. Other advantages for a company to stay with an existing vendor include simplified technical support and a known track record on the part of the vendor.

4.2.4 Surviving the Selection Process

Because SPM is a new paradigm, little has been published about the different solutions available to companies or about the feature-set companies should look for when evaluating a solution. When a sustainability team secures a budget for their reporting activities, they are likely to narrow their search to include software they have heard about in the past or software recommended by existing business partners. Most companies are not yet investing in extensive requirements gathering sessions and lengthy pilots of vendors. As an example, one reporter interviewed for this project selected their SPM solution based on a recommendation from the communications company that prepares their annual report. This trend is likely to change as the market matures.

4.2.5 Competing with Free Tools

If a company is looking at an SPM tool to help with specific areas, such as greenhouse gas (GHG) emissions calculation, a quick Internet search will return a variety of free, web-based tools to help with this task. Tools vary from the simple GHG calculators to sophisticated online communities that let companies create reports from their data, provide industry benchmarks, and allow sharing of information and best practices between members. Although free tools are provided "as-is", with little support and no commitment to future enhancements, they nonetheless come with built-in knowledge and baseline data, which is especially important when it comes to reporting on complex topics such as GHG emissions. One example of a free, web-based tool is OpenEco (www.openeco.org), created by Sun Microsystems in collaboration with CERES and a consulting firm called Natural Logic.

4.3 Technology Options for SPM

In a survey conducted by AMR Research in 2007, 89% of American companies and 62% of European companies were planning to invest in technology to manage their sustainability performance. (Montgomery & Prior, 2007)

Companies have a few options when investigating SPM solutions. First, they can extend existing corporate systems, such as their Enterprise Resource Planning (ERP) software, with specialized modules designed to capture and report on sustainability initiatives. Large enterprise software providers have already taken notice of the interest in SPM. For example, Microsoft is developing an environmental dashboard to be deployed with its document management system (*Microsoft SharePoint®*) and ERP software (*Microsoft Dynamics™*). (Microsoft Corporation, 2006) Part of SAP's solution for governance, risk and compliance (GRC) includes an application on corporate sustainability management. (SAP, 2007)

Companies can also leverage their existing relationship with vendors of environmental management software, if applicable. These niche vendors are extending their product portfolio with sustainability applications and currently dominate the SPM reporting software market. (Caiteur Group, 2007)

Companies can implement a new performance management system to replace, or integrate with their existing disconnected data collection and reporting tools (spreadsheets, custom databases, etc.). Many specialized software vendors have developed dedicated SPM and reporting tools.

Finally, it is always possible for a company to continue using existing systems and readily available desktop software to capture and track sustainability performance

data. Companies in the early stages of SPM might decide to focus on the low-hanging fruits and delay company-wide implementations until a compelling case has been made for additional investments.

4.4 SPM Software Competitors

Individuals who were interviewed for this project were asked to name SPM vendors they had seen (demo, presentation) or could remember by name. The solutions identified can be considered competitors of Visible Strategies' *see-it*, which a few vendors also listed as an SPM solution.

Unlike Visible Strategies, all competitors were GRI Technology Partners in 2006. Companies that joined the partnership advertise their solution as being in alignment with the GRI Framework. ("GRI Portal – Tech Partners", n.d.)

4.4.1 BSI Management Systems

BSI Management Systems is a division of the BSI Group, a global business services provider based in the United Kingdom. BSI purchased Entropy International in 2006 and Entropy Software then became the main solution of the BSI Management Systems division. The BSI Group employs over 2,200 staff, the majority of which is located in Europe, and had a revenue of £164 million in 2006. ("More About BSI Group", n.d.)

Entropy Software™ is a web-based product for risk, compliance and performance management. Two interviewees identified Entropy as an SPM reporting software, but none of the companies contacted had implemented this solution.

4.4.2 Flag (credit360)

Flag is a communication firm in the United Kingdom that specializes in investor communication and corporate responsibility. Based on their experience working with large corporate reporters, Flag created a web-based corporate responsibility data collection and management system called "credit360". Flag is owned by Computershare, a global financial market services and technology provider for the securities industry. Computershare employs approximately 10,000 staff and had a revenue of over US$1.4 billion in 2007.

credit360 is a web-based service (hosted externally) that provides data management and analysis capabilities as its core product. Customers can purchase add-on modules to enhance the core product with actions tracking, indexing (GRI), delegation and content management capabilities.

Five interviewees identified *credit360* as an SPM reporting software. Two companies were using the solution to manage their data, but did not use credit360 to publish sustainability content on their corporate web site.

4.4.3 Enablon

Enablon is a privately-held French company that specializes in sustainable development reporting and management software. The company has less than 100 employees and does not disclose its financial information publicly.

Enablon has three main suites of software: corporate responsibility and health, safety and environment (HSE), enterprise risk management and internal controls, and corporate governance and legal management. One of the modules in the corporate

responsibility and HSE suite is specifically designed to manage sustainability performance.

Four interviewees identified Enablon as an SPM reporting software and one company was in the process of conducting a pilot project with this solution.

4.4.4 ESP (Environmental Software Providers)

ESP is a private company based in California that was founded in 1992 and is 100% employee-owned. The company has less than 50 employees and does not disclose its financial information publicly.

ESP's solution called *OpsEnvironmental* is a web-based tool (hosted externally or internally) that includes task management capabilities as well as built-in regulatory and corporate sustainability reports. *OpsEnvironmental* lets users from all over the company capture information in a centralized system and can be integrated with existing systems (for example: ERP, Material Safety Data Sheets system).

One interviewee identified ESP as an SPM reporting software but had not implemented this solution.

4.4.5 Proventia Solutions

Proventia Solutions was founded in 1999 and is based out of Finland. The company is a subsidiary of Proventia Group, an environmental technology company. Data about the Proventia Group dates back to 2005, when the company employed 82 professionals and reported annual sales of €12.8 million. (Proventia Group, 2006) Proventia has a partnership with a software vendor called Hyperion.

Proventia Solutions offers two software solutions for sustainability management: CSM (corporate sustainability management and reporting), which is a standalone, web-based solution and SDM (sustainable development management), which integrates with the Hyperion Financial Management solution.

Two interviewees identified Proventia as an SPM reporting software but neither had implemented the solution.

4.4.6 SAP (xEM)

SAP, founded by five former IBM employees in 1972, has grown to be one of the world's largest business software providers with 38,000 organizations running its software and 42,750 employees working in 50 different countries. SAP reported an annual revenue of €9,402 million in 2006. (SAP, 2007)

SAP has developed several applications that integrate with its platform *SAP NetWeaver®*. One of these applications is xEM, a solution for emissions management. Although xEM is an application limited to environmental initiatives, the fact that it was identified by one interviewee as SPM reporting software illustrates how companies with existing investments in business software are building their sustainability reporting solution. Applications and modules are added to the existing platform as the scope of sustainability report covers more metrics and functional areas. The interviewee that identified xEM had recently selected the application, but had not implemented it yet.

5: CHALLENGES FACED BY CORPORATE REPORTERS

This section first discusses the interviews conducted with corporate reporters for the context of this project. It then paints a portrait of the companies that were contacted and the individuals with whom the interviews were conducted. Finally, the section ends with a discussion of challenges identified by corporate reporters when discussing their current method of preparing and publishing their non-financial reports.

5.1 Interview Process

To gain a better understanding of the challenges faced by companies when preparing and publishing a report on their non-financial performance, 14 interviews with existing corporate reporters were conducted for this project. The overall objective of the interviews was to identify trends in the challenges faced by companies in different industries and determine if Visible Strategies' *see-it* solution was a likely fit to address the challenges in some industries more than others. All companies interviewed had published at least one self-standing non-financial report.

The idea behind selecting existing reporters for the majority of the interviews was to understand the challenges faced by companies that had already gone through the exercise of building a business case for sustainability reporting, identifying areas of focus and selecting key performance indicators (KPIs) to track over time. Sustainability performance management (SPM) software in itself is unlikely to be helpful to companies that are dealing with the early challenges of developing a sustainability strategy.

All interviews were conducted over the phone and usually only one interviewee was contacted at each company, unless another individual was in a better position to answer some of the questions. The interviewees were asked open-ended questions and the interviews lasted between 25-45 minutes.

To supplement the information provided by interviewees, the latest annual and non-financial reports form the companies were also reviewed.

5.2 Company and Interviewee Profiles

Most of the corporate reporters contacted for this project were Canadian companies, and a few had offices and operations only in Canada. Two multinationals were based out of Europe (France and United Kingdom), while two others were based out of the United States. The size of the companies varies widely, with the smallest having a staff of just over 1,000 employees while the largest employed over 120,000. In all cases, the interviewee was either involved with preparing and publishing the sustainability report (3 out of 14) or directly responsible for the sustainability report (11 out of 14). On average, interviewees had three years of experience in their current position and up to 17 years of experience within the company. Almost half of the interviewees had an environmental background, while the other backgrounds varied from public relations to legal or human resources. Three interviewees had formal education in sustainability.

Some of the interviewees contacted for this project requested that their answers remain anonymous; therefore, all the names of the companies, as well as the names of the interviewees, were kept out of this report.

Table 5-1 Company Profiles

Org. No.	Industry	Number of Employees	HQ Location	Annual Revenue (US$M) [1]	Title of Interviewee
1	Manufacturing – Personal Care Products	60,851	France	18,694	Director Sustainable Development
2	Financial Services	122,600	United Kingdom	33,417	Environmental and Sustainability Manager
3	Telecommunications	31,955	Canada	8,693	Director of Environment
4	Chemicals	4,871	Canada	3,892 [2]	Manager, Sustainability
5	Oil & Gas	4,527	Canada	N/A	Public Affairs Advisor
6	Oil & Gas	5,150	Canada	15,830 [2]	Senior Environmental Advisor
7	Financial Services	2,461	Canada	357 [2]	Accountability Programs Specialist
8	Manufacturing - Electronics	55,000	United States	15,895	Environmental Engineer
9	Mining	17,600	Canada	5,873	Manager, External Reporting
10	Financial Services	70,000	Canada	36,045 [2]	Senior Manager, Corporate Environmental Affairs
11	Oil & Gas	55,882	United States	210,1118	Sustainability Advisor
12	Mining	7,316	Canada	6,974 [2]	Sustainability Programs Officer
13	Chemicals	3,200	Canada	6,524	Information / Communications Analyst
14	Retail	1,120	Canada	197 [2]	Director of Sustainability and Community

[1] Based on latest financial information published (2005 or 2006)
[2] C$

5.2.1 Sustainability Reporting Experience

The majority of reporters interviewed published a non-financial report annually, while two reporters published bi-annually. If any information from the report was used to build a sustainability section on a corporate web site, the online information was updated at the same frequency as the printed (or downloadable) report. The corporate web site was also used to publish additional multimedia content, such as video testimonials from stakeholders.

Companies interviewed had published a non-financial report for anywhere from one to eight years. All but one of the companies interviewed were using GRI guidelines

to some extent, and the company not using GRI was in the process of integrating the guidelines into their upcoming report.

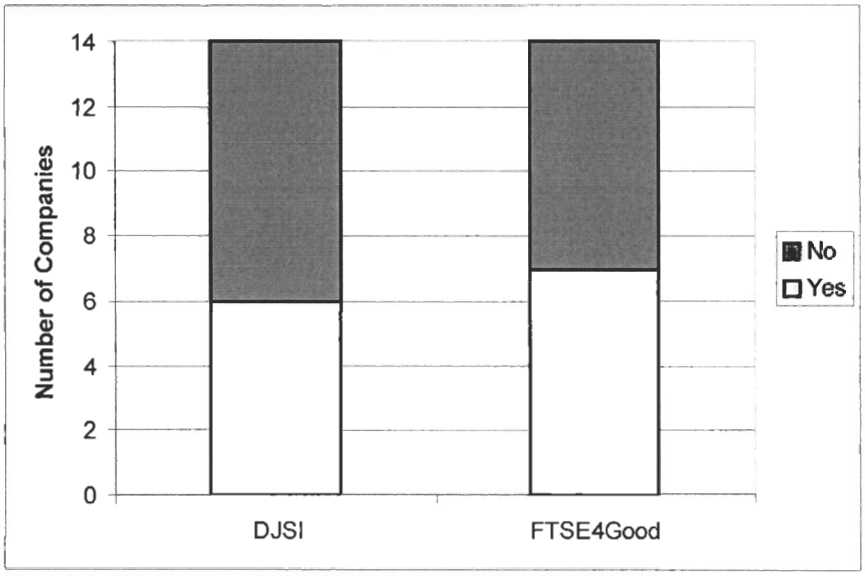
Table 5-2 Non-Financial Reports

Org. No.	Industry	Title of Report	Latest Report	# Years Reporting
1	Manufacturing – Personal Care Products	Sustainable Development Report	2006	3
2	Financial Services	Corporate Responsibility	2006	8
3	Telecommunications	Corporate Social Responsibility Report	2006	8
4	Chemicals	Sustainability Report	2006	5
5	Oil & Exploration	Sustainability Report	2006	5
6	Oil & Exploration	Report on Sustainability	2007	3
7	Financial Services	Accountability Report	2004-2005	5
8	Manufacturing - Electronics	Report on Global Citizenship	2006	1
9	Mining	Environment, Health, Safety & Social Performance	2006	5
10	Financial Services	Corporate Responsibility Report	2006	4
11	Oil & Exploration	Corporate Responsibility Report	2006	5
12	Mining	Sustainability Report	2006	6
13	Chemicals	Responsible Care Review	2006	8
14	Retail	Accountability Report	2005	1

5.2.2 External Recognition

Several companies interviewed were recognized for their sustainability programs through various awards and by being listed on sustainability indices such as the Dow Jones Sustainability Index (DJSI) and FTSE4Good. Three of the companies interviewed (all Canadian companies) were included in the list of Top 50 Leaders in sustainability reporting. (SustainAbility, 2006) Two of the companies interviewed made it into the top 10 positions of the Fortune Global 100 ("G100") 2007 Accountability Ranking. (AccountAbility, 2007)

Figure 5-1 Companies Listed on Sustainability Indices



5.2.3 Experience with SPM Software

Reporters interviewed for the project were asked to describe their level of knowledge of the software solutions available to them for SPM reporting. Even though SPM reporting represents a new market, the majority of reporters were familiar with at least one vendor and a few reporters had spent time evaluating some of the available solutions to see if one package could meet their needs. More information about the different vendors identified can be found in section 4: "SPM Software".

Five reporters had implemented, or selected but not implemented, an SPM solution to help with data management and analysis, as well as to generate the graphs that would then be included in their non-financial report. None of the companies used their SPM solution to automatically publish non-financial information to their corporate web site.

Figure 5-2 Companies Familiar SPM Software

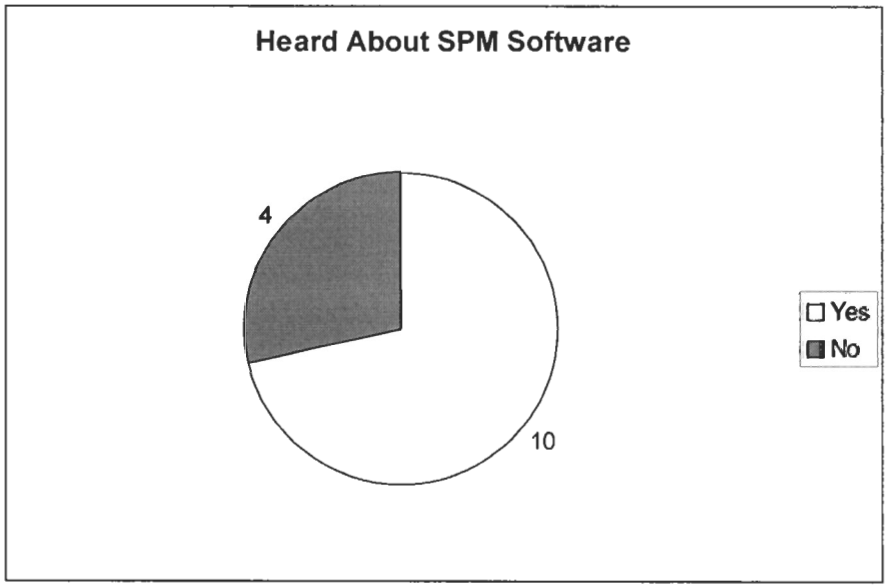
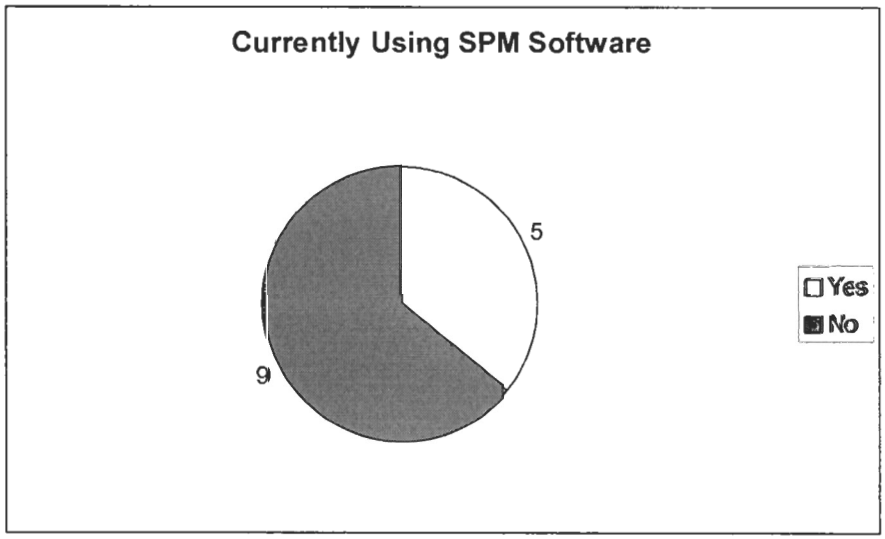


Figure 5-3 Companies Using or About to Use SPM Software



5.3 Challenges Faced by Existing Reporters

As stated earlier in this section, the original objective behind conducting the interviews was to identify challenges faced by companies within different industries and then look for an alignment between how these challenges could be addressed and Visible

Strategies' *see-it* solution. After the interviews were conducted, it became clear that the challenges faced across industries were very similar, at least when it comes to fairly large companies that have some experience preparing non-financial reports. Although the content of the reports varies between industries, and although some industries have developed voluntary guidelines or are reporting against specific regulation, the process of collecting, analyzing and presenting non-financial information was more or less the same across all industries. The challenges described in this section are limited to non-financial reporting, not to developing an overall corporate sustainability strategy, which is beyond the scope of this project.

The challenges listed in Table 5-3 represent those that were raised by interviewees as they were discussing their existing reporting process. Shaded columns represent companies that have recently selected an SPM solution to help with these challenges (#3 and 6), or have implemented an SPM software solution (#9, 11 and 14). Challenges are listed based on the number of companies that raised them.

Table 5-3 Summary of Challenges Raised by Reporters

Challenge	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Data management	x	x	x	x	x	x	x	x				x	x	
Different information needs of stakeholders	x	x				x	x	x	x	x	x	x		
Coordination of data collection	x	x	x	x		x	x	x						
Measurable goals	x	x								x				x
Improvement of online content	x					x	x							x
Non-quantitative metrics, social reporting	x		x											
Real-time data updates			x			x								
Lack of resources									x					

5.3.1 Data Management

The main challenge raised by reporters was the management of data. All the companies that had not implemented an SPM solution, except for one, identified data management as a challenge. Reporters struggle with information that must be compiled from a variety of sources. Some departments use proprietary databases, others have just started tracking their data and compile the information manually. When information is stored in databases, the systems are not integrated and data must be extracted into a common format (in a spreadsheet) before being consolidated and analyzed. Several interviewees expressed frustration with their current process and found it time-consuming. One interviewee mentioned that their response to stakeholder feedback was two years behind because of the amount of time required to prepare the annual non-financial report. Also, when information was rolled-up only on an annual basis, it prevented companies from measuring their performance throughout the year.

Another data management challenge in large, multinational companies is getting all sites to capture their information consistently, and in a timely manner. Because different sites might be capturing information using different systems, details could be missing for one site, or metrics could be captured differently. It then becomes difficult to assess the quality of the consolidated information.

Finally, companies wanted to have an audit trail of the data collected over time (who entered the information and when) to facilitate assurance of the information published. When data is copied from one system to another (database to spreadsheet), the auditing process can become fairly complex and expensive, and might require interviews with several internal data owners.

5.3.2 Different Information Needs of Stakeholders

Reporters were aware of the different information needs of their stakeholders and many struggled to prepare the appropriate communication tools to address these needs. In some cases, specific data must be compiled in a formal survey (for example, when applying for listing in the Dow Jones Sustainability Index), while other professional stakeholders will read the detailed non-financial report published by the company. A printed, or downloadable PDF version of the report is also what sustainability rating agencies such as SustainAbility and Stratos will review. Professional stakeholders want to review data over several years, and look for data and graphs that help them identify trends. (Pleon, 2005)

However, the general public is unlikely to spend time reading a lengthy report. Companies have either published a shorter version of their non-financial report, or printed brochures that can be distributed at points of sales. Also, the corporate web site is often the destination of choice for information targeting the general public. Some reporters published an HTML equivalent of their non-financial report, while others preferred using the web site to publish different content, especially videos or short animations for stories. Reporters found it important to link their sustainability programs to the people they involve, as well as to the people who benefit from the programs. Stories and testimonials were considered important communication tools.

In most cases, formatting and organizing the same information for the different audiences was a manual exercise. The full-length report was typically the first document prepared, followed by updates to the web site and then summary reports. The surveys completed for indices had to be prepared around the same time every year.

5.3.3 Coordination of Data Collection

In addition to finding it difficult to manage their data, reporters were challenged when came time to compile the outputs from all data owners. A few companies estimated that their cycle to prepare the non-financial report lasted the entire year and involved over a hundred different individuals located around the world. Communication to coordinate the data collection is done by phone or by e-mail, and can require several cycles as the data is first collected, then reviewed for inconsistencies and missing information, and finally approved. Most of this coordination is done manually.

5.3.4 Measurable Goals

Several interviewees mentioned that their stakeholders had asked them to start including more measurable goals in the non-financial report. Although many of the companies contacted did include short-term targets for metrics (the following year's goals), this was not common for all measured impacts. For example, one interviewee said that the company's 2007 report would include 2015 targets for greenhouse gas (GHG) emissions, water use and waste reduction, but other indicators would only be described using the current year's data, compared with the past year's data and set against the following year's target.

Companies will need to collect a few more years of metrics before a longer-term analysis can be done on past performance and used to extrapolate future performance. However, long-term projections cannot simply be an extension of the current performance and must be developed by factoring in overall business strategy. Changes in operations (acquisition, plant or extraction site closure, expansion) do have an impact on

environmental and social metrics. For planning purposes, companies need to be able to look at their non-financial data in a variety of ways (by country, by site, etc.)

5.3.5 Improvement of Online Content

A few interviewees mentioned that they would like the sustainability section on their corporate web site to be improved. Areas for improvement that were identified include more frequent updates to the site's content, offering more online content, and including more stories and videos on the site. Some interviewees admitted that their current site content was only repeating the printed report sections, with little reworking of the information and content to take advantage of the medium. One interviewee also found that although their sustainability web site did contain animations, photos and interesting graphics, it wasn't efficient as a communication tool as it contained very little information.

5.3.6 Non-Quantitative Metrics, Social Reporting

Existing reporters had substantial experience measuring their environmental impact. Usage of resources like water, electricity, raw materials and waste can be tracked using operational systems, invoices, purchase orders, etc.

However, how to measure the company's social impact was a challenge identified by a few reporters. Not only do companies have to figure out how to measure qualitative information (employee satisfaction at work), but when it came to topics like diversity, multinational companies found it difficult to assign metrics and targets that would reflect their worldwide operations. One example provided by an interviewee was workforce diversity. In the United States, companies can collect information about their employee's

ethnical background and therefore prepare reports on the percentage of minorities employed at various levels in the company. In Europe, privacy laws prevent companies from collecting this kind of information. Therefore, when discussing diversity in its report, the company preferred referring to guidelines and codes, not metrics.

5.3.7 Real-Time Data Updates

Most reporters were happy with their annual non-financial reporting cycle and as far as most stakeholders were concerned, did not seem to think that more frequent information updates would add value.

However, two interviewees from companies that had recently purchased an SPM solution, or were in the process of running a pilot program, wanted to have the ability to get real-time updates of their non-financial data. The audience for this information was not external, but internal. Both interviewees wanted to have the ability to generate reports on a regular basis so they could spend time reviewing progress, analyzing trends and focusing on continuous improvement. These interviewees saw value in going beyond reporting only to stakeholders and using the data to manage performance.

5.3.8 Lack of Resources

Most sustainability teams are small and include a few full-time individuals. Although only one interviewee clearly identified limited resources in personnel as being a challenge, most interviewees did mention that, at one point or the other, their workload became overwhelming. In all cases, the sustainability initiatives had the support of the executives in the company, but the investments in resources for sustainability were slow

to materialize. This is not uncommon for new strategies for which companies are still in the process of evaluating the return on investment (ROI).

5.4 Feedback on see-it

Interviewees were asked to provide "first-reaction" feedback on one specific implementation of *see-it* by viewing the following site: http://www.novex.ca/online-order-login/2.html. Basic background information was provided to the interviewees about the company for which the site was developed and interviewees were encouraged to navigate around the site to the areas where performance data was tracked.

Table 5-4 lists some of the positive comments made about *see-it*.

Table 5-4 Positive Feedback on see-it

Org. No.	Comment
1	Great tool for general public Good presentation of the data
2	Could be used for internal reporting Nice fit for small to medium businesses with simple strategies
3	N/A
4	Good if company moves to quarterly data updates
5	Good that content is published in format other than PDF Looks good
6	N/A (site was unavailable for this interview)
7	N/A (site was unavailable for this interview)
8	User friendly Visual is very nice Could see using as internal tool Good that user can drill-down and see data
9	Liked interactive graphic, allows user to select content they want to review Good visuals Likes that updates would be published immediately Great for general public
10	Good presentation of information Interactive capability is interesting
11	N/A
12	N/A
13	Interesting, goes a long way in terms of transparency People can look at the metrics they are interested in Good for small company with simple strategy, or "green" companies
14	N/A

Table 5-5 lists some negative comments about *see-it*, but mainly lists concerns that interviewees expressed when looking at the site.

Table 5-5 Negative Feedback on see-it

Org. No.	Comment
1	Visual presentation could be more fun, less formal
2	Online content should not be limited to metrics (graphs), should discuss new initiatives and programs Our site is better than this tool
3	More of a user interface (reporting) than data management tool, a solution should include both
4	N/A
5	Company does not endorse suppliers (Visible Strategies copyright) Tool is limited to reporting Not sure if tool is best to present a large amount of data
6	N/A (site was unavailable for this interview)
7	N/A (site was unavailable for this interview)
8	Concerned about having control over what is published externally
9	Would still want the ability to show data in tables, not just graphs Would want to print the information Unsure where the data lived Stakeholders would still want the full report
10	Too many clicks to get to the data
11	N/A
12	Concerned with real-time publishing (security, data quality)
13	Concerned with using automated system (data quality) Complex reports with lots of data would make the graph look complicated
14	N/A

6: SWOT ANALYSIS

The following section reviews the strengths and weaknesses of *see-it* as an SPM reporting software solution. It then identifies opportunities that Visible Strategies might want to exploit for future growth and threats that should be kept in mind when approaching corporate customers.

6.1 Strengths

6.1.1 Reporting for the General Public

The main strength of *see-it* is its interface, which allows for easy navigation to key pieces of information. Instead of presenting information in a cluttered manner, over many pages on a web site, *see-it* organizes the data along the triple bottom line's people, planet and profit. A visitor of the site can focus on areas of interest and drill-down to see additional details on specific initiatives. This approach to presenting non-financial information makes *see-it* a good tool for communicating with a non-professional audience, which is nonetheless a stakeholder: the general public. This could represent a potential employee who is curious about the company's social and environmental programs, or members of a community where the company operates. This audience is unlikely to want to review a long, non-financial report.

6.1.2 Ease of Use and Implementation

The software *see-it* is very easy to use and requires little training before someone can be up and running with their own site. For the purpose of this project, Visible

Strategies gave the author a quick, one-hour online demonstration of the tool and this was enough to understand most of the functionality in the application.

Also, because *see-it* is a hosted solution, the customer does not have to worry about installing software and backing up the server containing the non-financial information. Users only require a web browser to access the product, software that is already installed on a typical corporate workstation.

6.2 Weaknesses

6.2.1 Data Management

Because of the way the information is presented in the graphical user interface, data captured in *see-it* is limited to four levels of granularity. If a large company is tracking very detailed metrics and needs to capture data from a variety of sources, this level of granularity will not be sufficient. For example, a company might want to be able to capture a breakdown of greenhouse gas (GHG) emissions by office and plant, roll this information up to the country level, then drill-down to look at individual items that are contributing to the companies overall GHG emissions to target specific areas for improvement. The current data structure in *see-it* limits the level of details that can be captured.

The current solution also does not offer a lot of options as to how the data can be reported on. Companies would want to have the opportunity of creating custom reports on the information they capture (internal reports with more details than what is published externally), as well as have the ability to query the database using different parameters.

Finally, as companies are moving towards integrating formal assurance into their non-financial reporting process, they need to be able to log individual transactions and extract logging information to prepare an audit trail. Auditors might want to review how often data is captured, how consistently it is captured across sites and verify who enters the data used to prepare the report. Without this capability, a sustainability audit could end up being just as complex and as expensive as if it were done with a collection of spreadsheets. Although *see-it* can capture information about ownership of the different actions, the software does not seem to have extensive auditing capabilities.

6.2.2 Reporting for Professional Stakeholders

The tool *see-it* has only one option for presenting the data: a web-based, dynamic graphic. For professional stakeholders, such as SRI fund managers, NGOs, and rating agencies, this format is too limited. Professional stakeholders will want to review detailed information about non-financial initiatives, see graphs that track data from year-to-year, get background information on programs, get sufficient information on goals and objectives, and have the ability to understand the company's overall sustainability strategy.

Because of the high-level view provided by *see-it* and the fact that data points can only be seen by clicking through the tree-like structure (three clicks to get to the charts from the main screen), this format might even prove frustrating to these stakeholders who need to review all the non-financial metrics.

6.2.3 Visibility

SPM software is new and not much has been written about this type of software in trades magazines or even CSR-related online publications. A company that is looking at options to meet their non-financial reporting needs might resort to a simple Internet search to get started on the subject and collect the names of a few tools. Visible Strategies does not have much visibility compared to other SPM software. A search on the Environmental Expert portal using the keywords "sustainability" or "CSR" returned up to 189 companies, including all the competitors identified in this project, but not Visible Strategies (or Real Living Solutions). Using Google, on November 14, 2007, the following rankings were obtained for Visible Strategies and its competitors.

Table 6-1 Internet Search Ranking of SPM Software Vendors

Keyword Search	Visible Strategies	credit360	Entropy	Proventia	ESP
Sustainability reporting software	131	22	130	16	1
CSR reporting software	164	41	> 300	> 300	2
Sustainability performance management software	> 300	180	67	5	64

6.2.4 Existing Success with Large Corporate Reporters

The competitors of Visible Strategies have large, known corporate customers. For example, credit360 was sold to Chevron, Agilent Technologies, Ford Motor Company, ING, KPMG, and McDonald's. Entropy was sold to Barrick, GlaxoSmithKlin, Toyota and Vodafone. This makes it difficult for Visible Strategies to target these types of companies when competitors have case studies and existing implementations as proof-of-concept.

6.3 Opportunities

6.3.1 Rising Interest in Sustainability Reporting

Section 2: "Sustainability Performance Management (SPM) Reporting" reviewed the trend for companies to report on non-financial initiatives and this trend is clearly showing a growing interest by corporations in sustainability reporting. CorporateRegister.com, a web site through which companies can publish their sustainability report, shows the global report output increase from 26 in 1992 to 2,387 in 2006. (CorporateRegister.com, 2007) As more companies look at developing their sustainability strategy and preparing reports for their stakeholders, interest in tools that could help with this exercise is also likely to increase.

6.3.2 Small and Medium Size Enterprises

As the number of large enterprises that create sustainability reports eventually reaches a plateau, new reporters are likely to be small and medium size enterprises (SMEs). SMEs are companies with 250 employees or less and these companies represent over 90% of businesses worldwide. (UNIDO, 2002) The adoption of sustainability initiatives by SMEs is hampered by several challenges unique to these companies: the perception that SMEs have little individual impact, the lack of internal sustainability expertise, and the perception that money invested in sustainability will generate little return. (Lawrence, Collins, Pavlovich & Arunachalam, 2006)

These challenges have not gone unnoticed and several groups are now addressing SMEs with targeted information and portals. The European Commission has recently launched the Environmental Compliance Assistance Program to help SMEs comply with environmental legislation. (European Commission, 2007) The GRI also published a

handbook based on the G3 guidelines for SMEs. ("GRI Portal – Small and Medium Enterprise", n.d.)

6.4 Threats

6.4.1 Increased Adoption of GRI

Visible Strategies, unlike all competitors listed in this project, is not identified as a GRI Tech Partner. Because of the increasing adoption of GRI's guidelines by corporate reporters and the recognition of G3 as being an international standard for non-financial reporting, Visible Strategies risks being rejected by companies which are researching solutions with a built-in GRI index, or some form of GRI integration.

6.4.2 Interest from Large Business Software Providers

Although it might take a few more years before large business software providers start investing heavily in SPM reporting, when they do, their presence in the market will make it more difficult to sell to companies. Solutions backed by known names have less chance of disappearing overnight, are sold with product support and lifecycle policies, and are likely to be the topic of technical books.

7: RECOMMENDATIONS AND CONCLUSION

This section discusses a few recommendations Visible Strategies might want to explore when approaching the corporate market with their sustainability performance management (SPM) reporting solution. The section ends with a conclusion for the entire project.

7.1 Recommendations

The following recommendations focus on short and long-term approaches to selling *see-it* to the corporate market.

7.1.1 Short Term: Partner with Software Vendor with Data Management Solution

Building the database capabilities that are expected from a comprehensive sustainability data management solution would require a significant investment from Visible Strategies and could likely take years to complete. During that time, competitors are gaining market share within the corporate reporting segment.

Because *see-it* is lacking the performance and data management capabilities that would be expected from an SPM tool, Visible Strategies should look into partnering with a company that already develops a solid performance management tool but lacks corporate social responsibility (CSR) experience and web-based reporting capabilities.

Visible Strategies needs to present potential customers with a whole product solution that addresses their current solution's data management limitations and would also provide a solid starting ground for customer implementations. When a new project is

created in *see-it*, there are no built-in performance indicators or guidelines that could help a company implement SPM. Another partnership approach could be to target existing vendors of systems that represent a key area in SPM. For example, environmental management systems (EMS) have extensive data collection and management capabilities but might not have the built-in capabilities that *see-it* has to communicate key information to stakeholders. The integration of the two solutions could help provide potential customers with a more complete product offering.

One of the additional points to consider when looking into partnerships would be the integration capabilities of potential partners. Visible Strategies has focused its current partnerships on extending its market reach through resellers and providing consulting services to customers that have little or no background in SPM. However, a software partnership could also allow Visible Strategies to benefit from the integration experience of a larger or more experienced vendor. When an SPM system is introduced into an organization, there could be systems in place that already capture and track some of the data that would be monitored through the sustainability agenda. Visible Strategies needs to be able to integrate their product with these existing systems to limit the disruption of valid processes.

7.1.2 Short Term: Focus on SMEs

The large corporate reporters that were interviewed for this project showed little interest in *see-it*, even if many made positive comments on the tool. Reporters that have developed a company-wide sustainability strategy and are now collecting information on a regular basis from offices and sites all around the world are less concerned about how to present the information than they are about data management. Also, these companies

showed no interest in publishing only in a web-based format and would continue to look for a solution that allows them to prepare a printed or PDF report.

However, Visible Strategies' web-based reporting solution might be a better fit for small and medium size enterprises (SMEs). While large organizations tend to invest in non-financial reporting for business gain or to avoid damages to their brand and reputation, SMEs are more likely to use sustainability as part of their competitive strategy, especially in their interaction with stakeholders such as employees and customers. (Jenkins, 2006) This is important because then the focus is on communication rather performance management.

Because SMEs are likely to focus their sustainability efforts on a few programs or initiatives, a simple site with data relevant to the SME's ongoing initiatives can be prepared within the time it takes to demonstrate the application. Because the software is easy to use, a potential customer could see how previously disconnected information can be organized using *see-it*.

Visible Strategies can look at challenges faced by customer relationship management (CRM) and enterprise resource planning (ERP) vendors when selling to SMEs to understand the characteristics of this market. Key challenges identified in literature include a limited number of resources that can be dedicated to the implementation project, as well as limited process experience within the company. (Buonanno et al., 2005) Some of the approaches that were explored by CRM and ERP vendors to address these challenges include offering simpler, pre-configured systems. Visible Strategies already benefits from having developed software that is easy to use and would require little training. However, any current customer engagement with a company

that has little experience in SPM requires extensive consulting work to help develop the company's internal knowledge. If Visible Strategies can build knowledge directly in their solution, as described in the recommendation about a software partnership, they could increase their appeal to SMEs by offering a total product.

One research study demonstrated how the existing business systems of a SME can be used to implement a wider, enterprise-level SPM initiative. In the study, systems used to track ISO 9001 (quality management) or ISO 14001 (environmental) compliance were used as an effective stepping-stone to get the company started on an enterprise-wide sustainability agenda. (Castka, Balzarova, Bamber & Sharp, 2004) By including existing systems into the overall business case for SPM, Visible Strategies can demonstrate concrete and attainable benefits, while presenting an overall plan for broader SPM programs. With this in mind, Visible Strategies can focus its sales effort on SMEs that are likely to have such business systems in place.

Another key benefit of SPM for SMEs is the increased ability to attract and retain the best talent. In his book on the business case for sustainability, Bob Willard estimated the cost of recruiting a new employee to approximately $7,000, while the cost of losing a "good" employee could be as high as $120,000 when including productivity and customer revenue losses while the position is vacant or filled with a new individual who requires training. (Willard, 2002) In industries where companies are constantly fighting to hire the best talent, such as in the high-tech industry, a sustainability agenda could help with the recruiting effort and reduce the turnaround of existing employees. By targeting SMEs in those industries and helping them prepare a business case that reflects these costs, Visible Strategies can gain more traction than by focusing on the morality of SPM.

7.1.3 Medium Term: Provide GRI Indexing

The number of companies reporting using the GRI index has been increasing over the years. With G3, companies are able to use the GRI at different application levels, which is also likely to help push the acceptance of the guidelines within the corporate community.

Companies, even SMEs, that wish to use the GRI to prepare their report should be able to tag some of their data points against the index. This way, a GRI report could be generated directly from the information entered in *see-it*, and included in the web-based output.

By allowing tagging against GRI guidelines, Visible Strategies would also be able to join the list of GRI Tech Partners and increase its visibility through that partnership.

7.1.4 Long Term: Go Beyond Online Reporting

The company should look at providing alternatives to the web-based output. A recent survey of stakeholders identified a downloadable version of the printed report (usually in PDF format) as the preferred format for a CSR report. On 495 stakeholders surveyed, 52.1% preferred a PDF, 49.9% preferred a printed (paper) report, 38.8% preferred a short printed summary and a large report on the Internet and only 33.7% preferred viewing the entire report online. (Pleon, 2005)

The preference for PDF and printed reports was also confirmed by the interviewees in this project. When individuals discussed their intent to increase web-based sustainability content, it was always as a supplement to the formal report and meant to take advantage of multi-media technology (images, videos) for case studies and

stakeholder stories. Online content like that generated by *see-it* was seen as a great way to communicate sustainability initiatives to the general public, but could not replace formal reports targeting professional stakeholders (analysts, investors, NGOs).

7.2 Conclusion

This research project was initially conducted with the objective of identifying industry-specific needs of corporate non-financial reporters that could be met with the existing features included in Visible Strategies' *see-it* tool. The content of non-financial reports from one industry to the other tends to vary extensively, quite understandably when one considers the differences between mining and telecommunications operations, for example. However, although different industries include different indicators in their non-financial reports, the challenges faced by individuals tasked with preparing these reports do not seem to vary between industries.

For large corporations, the main challenges were the management of large amounts of data and the coordination of information collection between dozens, if not hundreds of data owners. These are not the challenges that *see-it* is best suited to address.

While trends show more companies preparing non-financial reports every year, these companies are mainly large multinationals operating in industries with known environmental and social impacts. Very few small and medium size enterprises (SMEs) have embraced sustainability as a competitive advantage and a source of future opportunities. However, this is already changing as SMEs, often the suppliers of large multinationals, see their customers looking beyond their immediate operations and into their supply chain. The rising interest from the public in "green products" could also help

drive more SMEs towards sustainability. SMEs represent interesting opportunities for Visible Strategies as their sustainability programs are likely to be simpler (fewer sites, fewer product lines) and good candidates for the *see-it* interface.

Visible Strategies might also look beyond the current project for additional opportunities in the corporate market. Past successes with governments and cities might help establish business relationships with crown corporations. Additional research would be needed to see if the problems addressed by *see-it* for governmental organizations are also current concerns of crown corporations.

A follow-up project could also be undertaken to engage in a dialog with SMEs about SPM and the barriers for adoption. This could help Visible Strategies better focus their business case and target specific customers within the broad SME market segment.

Finally, Visible Strategies might want to explore tools it could develop to help SMEs make the business case for sustainability. Internal expertise in corporate sustainability could be leveraged to even build knowledge into *see-it*, especially around current hot topics such as climate change and greenhouse gas (GHG) emissions.

APPENDIX: INTERVIEW QUESTIONS

Background / Experience

1. What is your title and how many years have you worked in your current position?
2. Can you describe your level of involvement with sustainability reporting at your company?
3. Have you worked on corporate sustainability in a previous job?
4. Can you tell me a bit about your background (education, work experience)?

Current Reporting

5. Where do you get the information that is communicated in your sustainability reports / web pages? (especially data, for example, energy consumption metrics)
6. How often is your corporate sustainability data updated (could be different for report, web content)? What kind of effort would you estimate is required for each update (time, number of people involved)?
7. Do you follow any standard / guidelines when reporting on corporate sustainability for your company?
8. Are you aware of any sustainability reporting requirements / regulations for your industry?
9. What kind of software do you use to prepare your corporate sustainability report / web pages?
10. Does your company collect feedback from stakeholders on your sustainability report / web pages? Can you comment on some of the positive and negative feedback you have received?
11. Do you think your corporate sustainability report, over time, clearly shows progress your company has made addressing issues?
12. Would you change anything in the current way your company reports on their sustainability initiatives?

Sustainability Performance Management (SPM) Software (Not Currently Using)

13. Have you ever heard of SPM software, or corporate sustainability reporting (CSR) software? (If so, any specific vendor and in what context, i.e. trade show?)
14. If familiar with this type of software, any reason why you are not using it?

Sustainability Performance Management (SPM) Software (Currently Using)

15. You mentioned previously that your company uses performance management software to compile and report on your sustainability data, what vendor?
16. What were the selling points / features for picking this vendor in the first place?

Sample SPM Solution

Please visit http://www.novex.ca/online-order-login/2.html for an example of corporate sustainability reporting using a third-party software package (background to be provided during the interview).

17. What is your impression on presenting corporate sustainability information as you've seen it in the web site?
18. Would your company consider showing content generated by a third-party tool on their corporate web site, or do you see this as an internal tool (intranet)?
19. What would be your expectation / requirements if you were asked to evaluate various SPM software solutions? (expected vs nice-to-have features)
20. Can you think of benefits for your company from using an SPM software solution like the one you have seen? Any disadvantages?
21. Do you have anything other comment, observation?

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