Editorial

The Need for a 5-Star Reporting Index™ for the Ranking of Publicly Listed Companies: A Conceptual Framework

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Abstract

It is recognised in today's business environment, that enhancing economic values must be subject to the constraints imposed by environmental, social and governance issues. The paper first argues that the scope of an organisations reporting (and resultant audit certification) must be extended to cover such multiple bottom-line issues. The paper also considers the importance of a motivated workforce in implementing value-enhancing initiatives, and how an empowered open-book approach to financial reporting can provide significant motivational benefits that ultimately result in increased value.

The final recommendation of the paper is to prescribe a process and metrics for a holistic approach to value-based reporting, combining the reporting issues raised by the economic, environmental, social, governance and empowerment frameworks within a 5-STAR Reporting Index™ for the ranking of all publicly listed companies.

Keywords

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Introduction

The Financial Statements prepared and audited in today's economic environment can be traced to the industrial era, when tangible assets such as machinery were the engines of growth. In this era, financial accountants endorsed or invented rules based on the historical cost doctrine that yielded values which, in many cases, had no counterparts in commercial reality –i.e. often book valuations were sheer fictions. Even as the economy moved to knowledge workers as the engines of growth, such intangible assets were kept off the Balance Sheet, thus making the valuations even more fictitious. This has resulted today in knowledge-economy companies reporting book values widely divergent of market values. These fictitious financial reports were then audited, and the auditors were paid well by the preparers of the statements to hold that the statements gave a true and fair view of the state of affairs of the company. When some of these companies failed spectacularly due to the mismatch between commercial reality and reported values, the reason for failure was pinpointed as being the lack of an accounting standard. Thus another industry was created, that of setting accounting standards, and although no company has ever collapsed due to the reasons of reporting to different accounting standards worldwide, the 'convergence' of accounting standards is now seen as the panacea to avoid another round of corporate collapses.

The more recent collapses have been of such magnitude, however, that the financial accounting profession and its reports are no longer entrusted with the sole reporting role in the performance of an organisation. The legal and finance profession via legislation and stock market regulators have also become involved; in some countries with mandatory regulation such as the Sarbanes Oxley (SOX) 404 in the USA. In other countries, the regulation is still voluntary, such as the Australian Stock Exchange's 10-point Corporate Governance Guidelines. In the USA, the auditors can no longer hide behind the "lying directors" excuse as SOX 404 requires CFOs and CEOs to sign-off on the accounts as well.

During the last decade, and especially often the spectacular collapses of the early 2000s, other concerns have also arisen. Reports were demanded on the impact of the actions of corporations on the environment, and on society. "Triple bottom line (TBL) accounting" is thus the reporting extension of the concept of sustainable development, which has been defined as "development that meets the needs of the present world without compromising the ability of future generations to meet their own needs". TBL accounting thus attempts to report against three "bottom lines", namely an organisation's economic, environmental and social performance. Many of these bottom-lines required reports both in financial and non-financial terms.

It has now been seen, however, that financial and non-financial information *on its own* will not motivate the knowledge workers found in many modern organisations to strive to achieve the strategic objectives of the organisation in a globalised environment. In the emerging 'influential-economic' paradigm, the role of accounting is to *empower* these knowledge workers - i.e., train them to have knowledge understanding and then provide them with all the necessary information to steer their organisations successfully in the globally competitive waters.

Empowerment accounting using an open-book policy is, therefore, essentially not only teaching employees how to read organisational scorecards and enabling them to judge if their team is winning or not, but to be provided with all of the information (financial or otherwise) and responsibility required to be a team player in the game of business.

Thus there are five-bottom lines required in modern organisations: economic, environmental, social, governance and empowerment. Ideally, organisations need to report their performance against all five-bottom lines, and these reports need to be appropriately attested and certified. The paper traces these new approaches to performance reporting in keeping with today's economic paradigms, and the role the management accountants can play in the *creation* and *certification* of such reports.

The Five Reporting Bottom Lines

The Economic Bottom-Line (Financial Reports)

In the ***Industrial* – economy,** the double-entry accounting paradigm[1] permitted both the formation and maintenance of large, complex businesses, and the accumulation of the capital necessary to build the factories (non-current assets) of the industrial revolution. The financial statements of this era and the values reported therein were then "certified" as being 'true and fair' by the auditing profession.

The Accounting Profession believes that financial statements must be 'reliable', i.e. they must be both accurate and supportable. Such reliability would suggest that if two different accountants prepared the same statements, the two answers should come close to each other, particularly if they each relied on the same hard evidence. This is why the profession has worked hard over the last 30 years to issue 'Accounting Standards' to ensure that as much subjectivity as possible is removed in their preparation. Unfortunately the result is that we have financial statements such as that of Microsoft in the year 2000, which reported a book value only 5% of the value the market placed on it, because intangible assets such as knowledge workers were not recognised by these accounting standards as assets. Such reports whilst reliable, lack relevancy.

Accounting standards achieve 'reliability' by requiring evidence of an arms-length transaction between two parties. Thus when an organisation buys an asset, such as a

[1] This is based on the *historical cost doctrine* in which transactions impact the 'accounting equation': Assets – Liabilities = Equity, and changes in equity through operations was given by the equation: Profit = Revenue – Expenses. As one can see, of the four variables that impact on Equity, i.e. assets, liabilities, revenue and expenses, the non-current assets value is the most out-of date figure and thus subject to the most manipulation.

truck, from an external supplier, and cash changes hands, this is good evidence that the organisation now has an asset that exists (and in most cases can be physically verified, thus increasing reliability) and that a sale has been made by the supplier company, and thus a profit (or loss) can be recognised by it.

Despite the GAAP in most countries recognising that the purpose of financial statements is to also provide investors and creditors with information about future earnings prospects and cash flows (i.e. be relevant) in the case of intangible assets, because an 'arms length' transaction has not occurred (and thus their valuation fails the 'reliability' test), these are kept off the balance sheet, or the amounts paid in creating them are expensed. However, as argued before, intangible assets are equally as relevant to an understanding of the organisation's strategic objectives.

The last 20 years has seen the emergence and rapid growth of the ***informational - economy.*** With an increasing understanding of the impact of economic actions on the environment and on society, more information has been sought on 'sustainable value creation' rather than merely economic value creation. And with the advent of the recent spectacular corporate collapses, more information (transparency) was sought on the impact of a company and its officer's actions on its brand, reputation, and risk. These three areas, i.e. intangible assets and liabilities, were largely ignored by the industrial-era financial reports.

This has also resulted in the need for different kinds of 'certification' of these new information reports, some mandatory, some voluntarily sought by organisations, that go beyond the certification of the financial reports. The Standard and Poor's (S&P) ratings and ISO quality standards are examples of voluntary certifications sought by many organisations. If the accounting profession is to remain as the primary certification profession of an organisation's report to its stakeholders, then its auditors must be trained in the diverse fields in which the certified information will be sought. This includes the certification of the value of intangible assets.

The Environmental Bottom-Line (Green Reports)

Environmental reporting is becoming more and more common in business. Around 35% of the world's 250 largest corporations now issue environmental reports. That represents a significant change from just a decade ago, when it was hard to find any companies providing detailed data on their environmental performance to the public.

Companies are voluntarily embracing "green" reporting because it makes good business sense. Not only does public reporting push companies to be more disciplined about their environmental performance, which, in turn, reduces their environmental risk, it also creates positive Public Relations. Good green reporting can serve as a differentiator in the war for talent people like working for socially responsible companies - and it can make a company more attractive to customers and investors as well. Moreover, because green reporting puts all business practices under scrutiny, it often helps managers identify cost savings and even new business opportunities. Thus, with tools such as Activity Based Costing, Value Analysis and Life-cycle costing, this area is right up the management accountant's street.

This means that in addition to such economic measures as Economic Value Added (EVA®), the environmental measure of *Environmental Value Added (EnVA)* could be reported, which among other things, organisations must adjust their measurements of wealth creation and profit with a charge for the natural capital employed. Natural capital is a combination of renewable and non-renewable resources that are utilised in the generation of economic wealth. Note that in the case of non-renewable resources, they are often consumed for a once-off benefit. Even in the case of renewable resources, the most important values are not in the timber produced by a forest or in the fish produced by a sea, but in the ongoing capacity of such ecosystems to produce yields on a

sustained basis. It must be remembered that some types of natural capital may be substitutable by technology and other forms of man-made capital, but most are not.

Due to such calculation difficulties in linking economic results to its impact on natural capital, even companies pioneering in the environmental accounting field have typically not yet integrated environmental accounting into their mainstream accounting, although some are working in this direction.

Key barriers include:

- the lack of a standard methodology,
- the fact that accountants and auditors lack environmental experience,
- the difficulties involved in identifying environmental costs (particularly in companies pursuing integrated investment strategies), and
- the valuation of liabilities.

Since environmental reporting is so new, and due to the above barriers, many companies have struggled to get started. They have had to build their reporting processes from scratch, without proven models to guide them. Fortunately, that's changing. The Global Reporting Initiative, sponsored by the *Coalition for Environmentally Responsible Economies (CERES)*, has published structured but flexible guidelines that promise to bring some much-needed efficiency and consistency to the green reporting process. These guidelines would be extremely helpful for the management accountant wishing to provide consulting in the area.

Bristol-Myers Squibb, the health and personal-care products giant, has adopted the guidelines as the basis for its environmental reports, with excellent results. Its clearly structured report, updated frequently and posted for all to see on its corporate Web site, contains profiles of the company's worldwide facilities, summaries of its environmental policies and systems, a discussion of relevant stakeholder relationships, reviews of product and operations performance, and an overview of the environmental sustainability of its business. It's full of information - everything from the company's packaging guidelines to its levels of water use over time. Much more than a collection of dry data, the report gives readers a sense of the seriousness with which the company pursues its environmental goals.

Royal Dutch/Shell has also developed first-class reporting procedures but in a very different way. Since 1997, Royal Dutch/Shell has submitted all its environmental reports to external auditors for verification, on the theory that stakeholders are no longer content to take the company's word for its environmental record. The company has put a lot of time and money into developing verification methods and internal systems for collecting reliable data, and the investments have paid off. The rigorousness of Royal Dutch/Shell's reporting process and the reliability of its reports have made the company a leader in the world of green reporting. Stakeholders who once were critical of the company now hail it as a trendsetter, and even as a partner, on the road to sustainable development.

Bristol-Myers Squibb and Royal Dutch/Shell have taken different paths to building their environmental-reporting capabilities, but they have two vital things in common. They both take green reporting very seriously, devoting substantial resources to doing it well. And they are both reaping important business benefits as a result. Other companies would do well to study their examples.

However, all is not rosy in the green reporting field, even for Bristol-Myers Squibb and Royal Dutch/Shell. Both companies have come under attack from environmental groups claiming the reports are nothing but PR exercises despite the so-called "certification" from external audiences. Some of these criticisms have been based on documented situations of variations between what the companies are reporting and what they are actually doing.

Thus there is a need for the attestation and certification of the "green reports", by

properly trained "green auditors" rather than financial accounting trained external auditors.

Management accountants already have in their discipline, a number of the tools required to carry out such green audits, and further specific training can enhance their role in this area.

The Societal Bottom-Line (Social Reports)

Social accounting provides a bridge between the conventional or mainstream means of demonstrating corporate success, and the more unconventional but increasingly demanding call for acceptance of a corporation's implied contract with society.

There is ample evidence of mainstream adoption of ethical investment principles, both in Australia and worldwide, such as the, establishment of the Dow Jones Sustainability Index, and reported assets in ethical investments in the USA and UK growing by 50% per annum for the past decade with approximately $US3 trillion invested in ethical funds.

The question that must be asked, therefore, is, "What comprises an organisation's social responsibility?" Most organisations acknowledge today that they have an implied social contract, i.e. a "community licence to operate". Logic dictates that a corporation's acceptance of its part in an implied social contract then extends to an acceptance of accountability for breach of that social contract. As accountability necessarily requires a system of recording and reporting performance, then such reports must also be 'certified' by independent professionals as to their veracity.

Some examples of the elements of an organisation's social responsibilities are found in its record pertaining to the:

- Protection of health and safety of workers.
- Equal treatment of employees.
- Avoidance of bribery and corruption.
- Environmental protection.
- Use of child labour.
- Profit generation and payment of tax.
- Provision of secure jobs for its workforce.
- Uniformity of application of standards around the world.
- Responsiveness to public views and concerns about its performance.
- Willingness to assist with resolution of social problems.
- Support for charities and community groups.
- Support for indigenous groups.
- Product safety.

The third bottom line requires the reporting of *Social Value Added (SocVA).* Here, it is recognised that the ultimate bottom line for any project or business must not only be adjusted for environmental impact, but also must be adjusted for impacts on human and social capital.

In the case of human capital, organisations must account for knowledge and skills developed or lost. For example, in the case of social capital, the focus might be on the levels of resilience, and mutuality and trust in communities be they villages, mega-cities or world regions.

The likelihood that a credible standard for simultaneously measuring and reporting against all three 'bottom-lines' will be available in the near term is good, given, the continued demand for "sustainable development", the extent of public scrutiny of organisational performance reports, and the numbers and standing of corporations that have already published social and ethical reports. Once such standards have been established, the next logical step is 'certification' via some form of an external audit process. Obviously, the qualification and training of such professional 'social' auditors would need to encompass techniques and skills far beyond that possessed by the traditional external auditors of financial statements.

The Corporate Governance Bottom-Line (Accountability Reports)

Corporate governance as a serious and urgent research issue has become established over the last few especially after the public spectacle of failures of once-esteemed public firms during the first four years of the new century. As evidenced by the increasing number of codes of best practice developed by leading international bodies such as the OECD, the Commonwealth and CalPERS (refer Demirag *et al*., (2000) for a fuller list of publications), stock exchanges, securities commissions, corporate governance reform has now become a key global issue. Not only do factors such as the increasing globalisation of financial markets, the growth in multinational corporations and regional economic developments motivate the need for good corporate governance in the face of recent spate of large corporate collapses in Western economies such as the cases of HIH Insurance in Australia, Parmalat in Europe, Enron and WorldCom in the United States (U.S.).

Whilst these clearly signal the urgency for significant improvements in corporate accountability and reporting, the issue of corporate governance is even more important in transitional economies (see Roland, G., 2000). Attention to corporate governance is largely motivated by public interest in the economic health of corporations and society in general. However, the concept of corporate governance has got various dimensions as it potentially covers a large number of distinct economic, legal and social phenomena (see Ratnatunga & Ariff, 2005).

It must be noted at this point there are those who still regard the recent increase in attention to governance as a fad. As this group sees it, the stock of a well-governed company may be worth more simply because governance is such a hot topic these days. Believing in the value of corporate governance should no longer be a question of faith. Ariff and Ratnatunga (2005) state that some investors will pay a significant premium (ranging from 15%-28% in different countries) for good governance. Therefore, although governance is more important in some circumstances than in others, and more important to managers of some types of funds than others, it remains clear that good board governance can serve as a tool for attracting certain types of investors, as well as influencing what they will pay for stock.

Investors expect good corporate governance. There are three main reasons why investors will pay a premium for good governance, and the associated certification of such 'accountability' reports. Some believe that a company with good governance will perform better over time, leading to a higher stock price. This group is primarily trying to capture upside, long-term potential. Others see good governance as a means of reducing risk, as they believe it decreases the likelihood of bad things happening to a company. Also, when bad things do happen, they expect well-governed companies to rebound more quickly. A 1996 a survey by McKinsey reported that investors surveyed would place an average premium of 11% on stocks of well-governed companies. The reciprocal, of course, is that investors will punish individual companies, or broader markets, or even whole national capital markets, for serious governance deficiencies (recall the marked down values of Japan and ASEAN economies in the late 1990s).

Thus the reporting of what an organisation is doing in terms of good corporate governance appears to be directly linked to its ultimate value. This however, once again brings into question the issue of "believability" of such reports. Unlike the USA and its SOX requirements, most countries have only corporate governance "guidelines". Such voluntary reports, therefore, require the proper attestation and certification.

The Empowerment Bottom-Line (Motivational Reports)

A significant amount of research exists on the differences between the "Western" and "Japanese" management control systems. It has been argued that whilst the Western

management control systems have "truth and accuracy" as their reporting objectives, the Japanese control reports are designed to elicit "behaviour changes" of managers and employees, sometimes at the expense of accuracy. Both approaches have significant downsides. The Western approach often results in information understanding with very little behaviour modification by managers and employees. In contrast, the Japanese systems obtain behaviour modification, but very little information understanding.
The *influential-era economic paradigm* takes the view that employee behaviour can be modified in the long-run only by creating a holistic global ownership culture where behaviour is changed due to understanding the strategic impact of the information that is presented to such an employee. This is achieved only by ensuring that all participants know the "rules" of the game, know how the "score" is kept, and ultimately participate passionately in the "game" that is being played.

Thus, if employees do not know what the organisation's strategies are, or what measures are used to evaluate good and bad performance, then they would have no idea if the organisation they belong to is doing well or not. Consequently, they will not be motivated to work towards the goal of organisational success. The key aspects of this empowered open-book approach are that it:

- shares a broad array of financial and other information with employees,
- trains employees to become more business literate,
- empowers them to use the information in their work, trusting them as partners, and
- rewards them when the company is successful.

One can see that accounting plays a vital role in the implementation of such an open-book policy, as most corporate performance measurements are ultimately accounting-numbers based. Measures such as profit, return on investment (ROI), earnings per share (EPS), and the price-earnings ratio (P/E), are all derived from the financial accounting statements. If rank-and-file employees are provided these numbers, then they would need to understand and interpret these measures. Thus, training employees first in accounting (i.e. the language of business), and subsequently in other scorecards incorporating non-financials, becomes an important part of open-book management.

It has now been seen, however, that financial and non-financial information *on its own* will not motivate such knowledge workers to strive to achieve the strategic objectives of the organisation in a globalised environment. In the emerging 'influential-economic' paradigm, the role of accounting is to *empower* these knowledge workers - i.e., train them to have knowledge understanding and then provide them with all the necessary information to steer their organisations successfully in the globally competitive waters.

Empowerment accounting using an open-book policy is, therefore, essentially not only teaching employees how to read organisational scorecards and enabling them to judge if their team is winning or not, but to be provided with all of the information (financial or otherwise) and responsibility required to be a team player in the game of business.

The proper implementation of empowered open-book management requires, therefore, something more than training employees how to interpret financial and other scorecards. It requires a fundamental change in the traditional way in which managers operate their business; i.e. by providing both information and responsibility for employees to *think and act like owners*. Essentially, such managers are committed to *empowering* their subordinates to use the information provided, and act like the owner of their niche in the organisation.

Employees will act as owners, only if they share the organisation's goals, and are rewarded when these goals are achieved and the company is considered successful.

If measures are meant not only to 'inform' but also influence, then the *accountability* focus of accountants should also be widened. In the industrial-era, accountability was to owners, creditors and managers. In the *informational*-era, customers, suppliers, government and environmental groups, among others, increasingly demanded enterprises to be accountable (via various economic and political lobbying powers). In the emerging *influential*-era, employees are also demanding to be part of the ownership culture with full participation in implementing the objectives and strategies of the enterprise.

The Role of the External Auditor in the New *Reporting* Paradigms

The Corporation Law procedures in Australia, as in most countries, took dramatic steps forward in controlling the behaviour of company directors in the wake of the large amount of corporate collapses that took place in the early 1990s. Tough restrictions were placed on directors regarding on deals with related parties, such as loan and payments to directors. In general, the responsibilities and duties of directors became much more *onerous* than they have ever been (Ratnatunga & Gill, 1992). However, fast forward to the year 2002, and with the new buzzword of 'Corporate Governance', the directors were once again targeted. However, this time, in the wake of the Andersen collapse, the auditors were in the net as well.

In Australia, similar to most other countries, the responsibilities and duties of auditors flow through different mechanisms. Whilst the stewardship role of the auditor has direct legislative backing through Australian Corporations' Law, there are other responsibilities and duties that arise from many sources, such as: the standards set by the professional accountancy bodies, the precedents set by other auditors; the requirements of regulating bodies such as the Australian Securities Commission, the Australian Stock Exchanges and the Tax Office; the demands of the users of accounting information such as the shareholders, creditors, bankers and company analysts, and lastly, the expectations of the public at large.

Due to this multiplicity of demands, the dynamics of the audit environment appear to keep extending the role of the auditor which now encompasses corporate governance requirements such as independence from consulting, limitations on employment by clients, external directorships, etc.
Despite such an elusive definition regarding the role of the auditor, large claims are made against auditors when they are perceived as not performing in carrying out their duties and responsibilities. In the collapses of the early 2000s, no big-five Auditor escaped litigation, although the potential litigation against Andersen, made the Big-5 shrink into the Big-4. In addition to large actions such as the above examples, the real problem for auditors will be if smaller lawsuits become almost routine for liquidators. The possibility of this happening is very great because the auditors are usually said to have deep pockets, thus naturally more likely targets than bankrupt directors.

In order to ensure that a claim is not made by any or all of the multiple-users of audited financial statements, the auditor has to conduct an extensive audit to fulfil all perceived duties and responsibilities. However, there is ample evidence to suggest that even if the auditor takes the maximum amount of time, and approaches his or her work in a most professional manner with regards to duty and care, all of the user expectation in the *information-age* will not be fulfilled. Given this, and the reality that maximum time cannot be provided due to pressures of bidding for audits in an increasingly competitive marketplace, the modern auditor has become the natural target for the media, liquidators, shareholders, and any other affected party with regards to a company that has had a reversal of fortune (see Kohler, 1990)

The problems of the auditor, however, are not dissimilar to those faced in large industrial environments that manufacture and market products to satisfy customer needs. These companies are also held

accountable by regulatory authorities, lobby groups and society at large for product quality, safety, fair pricing and environmental conservation.

It is argued therefore, that the audit profession has similar consumer and public orientation with industrial companies rather than with the other professions e.g. medicine and law, and makes the proposition that an audit is in fact a package of services with the attributes of a product. This leads on to the view that a product marketing approach should be taken to the audit process, where more attention has to be paid to the *needs* of its customers. But who is the customer?

The Audit Customer

Satisfying the multiple expectations of the parties listed above creates a dilemma for auditors essentially because it is difficult for the auditor to determine exactly who the *customer* is. Conventionally, the auditor is recommended by the management, appointed and paid for by the owners, and (subject to the decision of the Caparo case) ultimately responsible to anyone who has relied upon the audited accounts. This can be contrasted with the practice of medicine or law where the doctor-patient or lawyer-client relationship is more direct. The patient or client seeks out and appoints the doctor or lawyer respectively. The service, and the payment for the service is also direct, although government funding is provided to ensure a required level of public health in the case of the medical profession, and legal aid in the case of providing a minimum level of assistance for those involved in litigation.

The doctor or lawyer is also protected by the patient/client confidentiality provisions, and, therefore, usually has a reporting relationship only to the *one* client. Audit firms on the other hand deal with multiple-customers. Therefore, the term *direct-customer* will be given to the shareholders of the company (the client) who have the company's management acting as their agent in recommending the appointment of the auditor. The term *indirect-customer* will be given to all other identifiable third-parties.

Whilst it is difficult to determine all of the needs of the auditor's customers, there is documented evidence that there is a demand for auditing services even when there is no "regulation" requiring an audit. Wallace (1980) provides American evidence of the demand for audits in unregulated environments, and states that this indicates that auditing services are valued in excess of their perceived costs by consumers. Thus, it is not just "regulation" that creates the demand for an audit; i.e. there exists a demand for an audit, from customer needs arising due to regulation and otherwise. These needs have increased due to the environmental, social and governance pressures faced by modern companies.

Examples of other forms of voluntary certification required in the informational age are the S&P ratings and ISO Quality certifications. Both these are requested by the direct-customer’s agents (i.e. the management) to obtain certain benefits from the indirect customers. In the case of the S&P ratings, a good rating translates into cheaper financing costs. Similarly, an ISO Certification is demanded by other third-parties prior to them dealing with the firm as a customer or supplier.

Increasingly, there is a growing demand by “ethical fund” managers not only for more ‘triple-bottom line’ reporting, but also certification of such reports. Lastly, SOX 404 type corporate governance type reports will also need certification. In many countries such certified reporting will done, not because it is mandatory, but because it makes good business sense to undertake these voluntarily.

The Audit Product

If it is not merely regulation that creates a demand for an audit, then it is important to understand why audits are requested. Wallace (1980) took the view that, regardless of the primary rationale for the audit, several product attributes are automatically obtained, all of which will influence the total number of audits and related services that are demanded. These are the attributes of control, reliability, regulatory compliance, and complementary services. Wallace (1980)

stated that given the above product attributes, the audit becomes a means of broadening the audited company's *customer* base. For example, if audited statements are required before a bank authorises a loan, or as a prerequisite to a public listing, or before an organisation is selected as a reliable supplier, then there is derived demand for an audit. Whilst some consideration must be given to the recent separation of audit and consultancy services, in holistic sense, SOX 404 type corporate governance requirements have certainly widened the requirement for certification beyond giving an opinion on the financial affairs of an organisation.

For example, the scope of the audit will certainly be different if companies report on the strategies being adopted to meet the demands of environmental groups or societal stakeholders. In such cases, the more traditional audit will need to be expanded to cover future oriented strategic audit based certifications, such as giving an opinion on the valuation approaches used to value intangible and tangible asset combinations that enhance an organisation's strategic capabilities.

As we know, currently the mandatory audit is only of past transactions based financial information, conducted by the financial accounting profession. Some "strategic auditing", especially in the area of 'risk management' may become mandatory following initiatives such as SOX 404. However, as demonstrated by Wallace (1980) much of certification process may be voluntary, for reasons such as borrowing and listing requirements. This voluntary demand can be further gauged if auditors survey the needs of its stakeholders, and the 'certifications' required by them in order to safeguard the strategic capability of the organisation in sustaining and generating value[2]. However, it will also be recognised that in today's business environment, enhancing economic values must be subject to the constraints imposed by environmental, social and governance issues. Thus the scope of an organisations reporting (and resultant audit certification) must be extended to cover such multiple bottom-line issues.

The Need for a Reporting Ranking System

Another powerful force that tends to drive 'voluntary' certifications is the maintenance and enhancement of an organisation's *reputation*. Organisations pay much attention today to 'rankings' based on both perceptual and factual data.[3] In the modern corporate world "being-ranked" using an index of some sort is seen as a value-enhancing proposition, and thus ranking of reputation (RepuTex), quality (JD Power), economic value creation (EVA®), environment sustainability (Columbia-Yale), etc. are much sort after. The authors believe that a reporting-ranking if developed by a by an acceptable accredited organisation will similarly create demand for the proper certification of the reports used for such a ranking. As such reports will be on issues that go beyond the financial performance of the organisation; it will need future oriented 'strategic auditors' to provide such certifications. Thus, it is argued that much of the 'customer *needs*' for a strategic audit, although voluntary, will be driven by powerful motives of the stakeholders who will see such certifications as enhancing the organisation's capability economic values.

The above multiple-bottom lines of economic, environmental, social and governance reporting requirements fall within the new 'informational' reporting paradigm. However, in terms of the 'influencing' paradigm, the importance of a motivated workforce in implementing value-enhancing initiatives, and how an empowered open-book approach to organisational reporting can provide significant motivational benefits that

[2] Such an approach was first mooted by Ratnatunga and Gill (1994) in which they make a case for Customer-Based Flexible Audits, by conducting surveys of shareholders to determine the scope of the external financial audit. In this paper we recommend that all stakeholders can be similarly surveyed.

[3] Universities, Hotels, Automotive companies, and Airlines pay particular attention to these rankings and spend significant resources in improving their relative rankings vis-à-vis competitors.

ultimately result in increased value has been discussed. Such initiatives must also be reported, and therefore the final recommendation of the paper is to prescribe a process and metrics for a holistic approach to value-based reporting, combining the reporting issues raised by the economic, environmental, social, governance and empowerment frameworks within a *5-STAR Reporting Index*™ for the ranking of all publicly listed companies. The five components of this framework are illustrated in Figures One, Two, Three, Four and Five.

Figure One: A Model for Economic Reporting

Criterion	Focus	Measures
1. ***Primary Stakeholder Expectations:*** An enumeration of the long-term economic expectations of shareholders, and the corporation's response.	A summary and candid enumeration of the primary economic expectations of the shareholder group of stakeholders.	Shareholder Value Added *(SVA)* Return on Investment (ROI) Earnings per Share (EPS) Market Price/ Market Value Price-Earnings Ratio
2. ***Objectives:*** A statement of the corporate economic objectives in financial terms for the reporting period.	A report on what the corporation will strive to accomplish financially and what priority it places on various activities.	Earnings before Interest and Tax (EBIT) Net Profit after Tax (NPAT) Dividends Paid Dividends per share (DPS) Cost of Equity (k_e) Cost of Debt (k_d) Debt/Equity Ratio Share Price Growth Economic Value Added (EVA) Credit Rating (Moody's, S&P's)
3. ***Strategies:*** A description of corporation's economic goals in each program area and of the activities it will carry on.	For each priority activity, the corporation will state a specific (quantitative) goal and describe how it is striving to reach that goal, (eg. to enter new geographical market segments, it will benchmark its quality initiatives with that of world-class competitors).	Marketing KPIs Quality KPIs Logistics KPIs Customer Satisfaction KPIs Technology KPIs Innovation KPIs Internal Processors KPIs *[The Balanced Scorecard concept links these strategic KPIs to objectives of the organisation]*
4. ***Implementation:*** Financial Statements indicating the resources committed to achieve economic objectives and goals.	A summary report, in quantitative terms, by activity, of resource costs, direct and indirect, invested by the corporation in achieving financial goals.	Manufacturing resources Marketing resources Logistics resources People Resources Financial Resources External Resources
5. ***Results:*** A statement of the accomplishments and/or progress made in achieving each objective and each goal.	The extent of achievement of each objective and each goal in Financial Terms.	Financial Performance (P&L) Financial Position (Balance Sheet) Cash Flow Statement Audit Opinion S&P Rating

Figure Two: A Model for Environmental Reporting

Criterion	Focus	Measures
1. ***Primary Stakeholder Expectations:*** An enumeration of the impact caused on the environment by the corporation's activities and its response.	A summary and candid enumeration of the primary expectations of the corporation in protecting the environment.	Environmental Value Added *(EnvVA)* Air Quality Harmful Substances Waste Water Wildlife & Countryside Global Warming
2. ***Objectives:*** A statement of the corporate environmental objectives and the priorities attached to specific activities.	For each program area the corporation would report what it will strive to accomplish and what priority it places on various activities.	Lead Reduction in Petrol Forest Damage Control Pollution Prevention & Control Screening for Lead Containing Level of *Genetically Modified Organisms* (GMOs) Sewerage Sludge Reduction Titanium Dioxide (SRD) Control Habitats & Species Conservation Comply with International, National and Local Conventions
3. ***Strategies:*** A description of corporation's goals in each program area and of the activities it will carry on.	For each priority activity, the corporation will state a specific goal (in quantitative terms when possible) and describe how it is striving to reach that goal, (eg. to ensure a reduction in pollution caused by the company, it will undertake an investment program in equipment more efficient in the use of fossil-fuel resources).	Reduce use of Landfill Spaces for Dismantled Equipment Recycle Plastics & Materials in New Products Reduce use of Toxic Chemicals in Production Reduce use of Ozone Depleting Substances in Products & Processes Reduce use of Volatile Organic Chemicals Efficient use of Fossil-Fuel Resources
4. ***Implementation:*** Statement indicating the resources committed to achieve objectives and goals.	A summary report, in quantitative terms, by activity, of resource costs, direct and indirect, invested by the corporation in achieving environmental goals.	Regulatory Inspections Compliance Related Activities Fuel Use Energy Use Water Use in Manufacturing Water Use per Employee Chemical Waste Management
5. ***Results:*** A statement of the accomplishments and/or progress made in achieving each objective and each goal.	A summary, describing in quantitative measures when feasible and through objective, narrative statement when quantification is impracticable, the extent of achievement of each objective and each goal.	Air Emissions Chemical Emissions NO_2/CO_2 Emissions Electronic Scrap Reusable Packaging Natural Gases Greenhouse Gases Agriculturally Sourced Nitrates Hazardous Waste Water Usage External Verification of Report Awards & Recognitions

Figure Three: A Model for Social Reporting

Criterion	Focus	Measures
1. ***Primary Stakeholder Expectations:*** An enumeration of social expectations and the corporation's response.	A summary and candid enumeration, by stakeholder program areas (eg, consumer affairs, local community development), of what is expected and the corporation's reasoning as to why it has undertaken certain activities and not others.	Social Value Added *(SocVA)* Consumer Expectations Business Partner Expectations Government and Regulators Expectations & Requirements Communities and Society Expectations Employee Expectations Management Ethical Expectations
2. ***Objectives:*** A statement of the corporate social objectives and the priorities attached to specific activities.	For each program area the corporation would report what it will strive to accomplish and what priority it places on various activities.	Protection of Health and Safety of Workers. Equal Treatment of Employees Avoidance of Bribery and Corruption. Provision of Secure Jobs for its Workforce. Uniformity of Application of Standards around the World. Willingness to Assist with Resolution of Social Problems
3. ***Strategies:*** A description of corporation's goals in each program area and of the activities it will carry on.	For each priority activity, the corporation will state a specific goal (in quantitative terms when possible) and describe how it is striving to reach that goal, (eg. to better educational facilities in the community, it will make available qualified teachers from among members of its staff).	Produce Roadmap of Good Social Practice Maintain Price/Value Link Develop Standards for Contracted Suppliers Develop Advertising Code Increase Performance Information Available Online Develop Societal Roadmaps for Operating Companies Develop Ethics Guidelines
4. ***Implementation:*** Statement indicating the resources committed to achieve objectives and goals.	A summary report, in quantitative terms, by activity, of resource costs, direct and indirect, invested by the corporation in achieving social goals.	Support of Indigenous Groups Support of Charities and Community Groups Reduced Use of Child Labour Developed Roadmaps for Marketing & Supply Chain
5. ***Results:*** A statement of the accomplishments and/or progress made in achieving each objective and each goal.	A summary, describing in quantitative measures when feasible and through objective, narrative statement when quantification is impracticable, the extent of achievement of each objective and each goal.	Product Quality/Safety Record Payment of Tax and Fees Social Partnerships at Country Level and with Global Bodies Business Partner Code Roll-Out Programme Social Reporting on Website Employee Turnover External Verification of Report Awards & Recognitions

Figure Four: A Model for Corporate Governance Reporting

Criterion	Focus	Measures
1. ***Primary Stakeholder Expectations:*** An enumeration of reporting transparency and reputation management expectations (mandatory and otherwise) of the community in terms of governance and the corporation's response.	A summary and candid enumeration, by program areas (e.g. Risk Management, Board Composition, Transparency), of what is expected in terms of corporate governance and the corporation's reasoning as to why it has undertaken certain activities and not others.	Governance Value Added *(GovVA)* Transparency of Information. Public Concerns Responsiveness Reputation Risk Management. Statutory Compliance. Board Charter & Independence. Ethical Management. Managerial Remuneration.
2. ***Objectives:*** A statement of the corporate governance objectives and the priorities attached to specific activities.	For each program area the corporation would report what it will strive to accomplish and what priority it places on various activities.	Recognise and Publish Board and Management Roles and Responsibilities. Establish Code of Conduct. Respect and Exercise the Rights of Shareholders. Recognise Legal and other Obligations to all Legitimate Stakeholders.
3. ***Strategies:*** A description of corporation's goals in each program area and of the activities it will carry on.	For each priority activity, the corporation will state a specific goal (in quantitative terms when possible) and describe how it is striving to reach that goal, (eg. to better ethical standards by corporate boards, it will appoint more independent qualified professionals from universities to its board).	Structure Effective Board Composition (Knowledge, Size and Commitment). Promote Ethical and Responsible Decision Making. Establish Structure to Independently Verify Integrity of Financial Reporting. Establish a System of Risk Oversight and Management, and Internal Control. Ensure Directors Equipped with Knowledge and Information.
4. ***Implementation:*** Statement indicating the resources committed to achieve objectives and goals.	A summary report, in quantitative terms, by activity, of resource costs, direct and indirect, invested by the corporation in achieving corporate governance goals.	Appointment of Appropriately Qualified Board Members and Managers. Disclosure of all Material Matters in a Timely and Balanced Manner. Formal Review and Actively Encouragement of Board and Management Effectiveness.
5. ***Results:*** A statement of the accomplishments and/or progress made in achieving each objective and each goal.	A summary, describing in quantitative measures when feasible and through objective, narrative statement when quantification is impracticable, the extent of achievement of each objective and each goal.	Balanced and Independent Board Representation. CEO & CFO Certification of Financial Statements. Defined (and Reasonable) Link Between Board & Managerial Remuneration and Corporate Performance.

Figure Five: A Model for Empowerment Reporting

Criterion	Focus	Measures
1. ***Primary Stakeholder Expectations:*** An enumeration of the extent of information provision to employees, and the associated responsibility expectations from employees, and the corporation's acceptance of such empowered employees.	A summary and candid enumeration, by program areas (eg, open-book management, balanced scorecard), of what is expected in terms of empowering employees, and the corporation's reasoning as to why it has undertaken certain activities in the area and not others.	Empowerment Value Added *(EmpVA)*. Board Empowerment Managerial Empowerment Employee Empowerment
2. ***Objectives:*** A statement of the corporate empowerment objectives and the priorities attached to specific activities.	For each program area the corporation would report what it will strive to accomplish in terms of empowering employees and what priority it places on various activities.	Share a broad array of financial and other information with employees. Empower Employees to use the information in their work, and take decisions without reference to higher level management.
3. ***Strategies:*** A description of corporation's goals in each program area and of the activities it will carry on.	For each priority activity, the corporation will state a specific goal (in quantitative terms when possible) and describe how it is striving to reach that goal, (eg. to provide focused information to employees in the organisation, have available hierarchical balanced scorecard based information at all levels of its staff).	Trust Employees as partners. Train employees to become more business literate. Providing both information and responsibility for employees to *think and act like owners (*i.e. share the organisation's goals). Promote an Entrepreneurial orientation amongst employees in terms of defined levels of risk-taking and innovation. Reward Employees when the company is successful.
4. ***Implementation:*** Statement indicating the resources committed to achieve objectives and goals	A summary report, in quantitative terms, by activity, of resource costs, direct and indirect, invested by the corporation in achieving employee empowerment goals.	Obtaining Management commitment to *empowering* their subordinates to use the information provided, and act like the owner of their niche in the organisation. Develop Measures that not only to 'inform' but also influence. Remove Restrictions to empowerment due to control procedures in accounting system (within statutory limits).
5. ***Results:*** A statement of the accomplishments and/or progress made in achieving each objective and each goal.	A summary, describing in quantitative measures when feasible and through objective, narrative statement when quantification is impracticable, the extent of achievement of each objective and each goal.	Level of Employee participation in implementing the objectives and strategies of the enterprise. Number of Employees Trained in reading Business Scorecards. Amount of Flexibility provided in authorisation levels to increase the efficiency and effectiveness of the employee. Level of Employee Satisfaction.

Strategic Auditing and the 5-Star Reporting Index™

Subramaniam and Ratnatunga (2003) state that strategic information reports should be developed to link long-term or strategic goals of an organisation with performance evaluation outcomes, and therefore that appropriate strategic audit techniques would also be required.

A *Strategic Audit* is far different from the common perception of financial audits. It is a continuous evaluation of all the strategic functions of any success-seeking firm. Due to such a wide scope, strategic audit issues are pertinent to management accountants, business analysts, audit directors, senior managers and executive-level management, as well as those aspiring to become someone who oversees audit, security, compliance and control functions. Some examples of the wide-scope of strategic audits is given below in Figure Eleven under each of the 5-STAR Reporting index criteria.

Figure Six: The Scope of Strategic Auditing

Economic	***Marketing Audit***: This is a comprehensive examination of the company's marketing environment, objectives, strategies, and activities with a view to determining problem areas and opportunities and recommending a plan of action to improve the company's marketing performance. ***Customer Satisfaction Audit***: This audit outlines the critical aspects of system-wide customer satisfaction, and provides tools for measuring performance along those lines. ***Cost of Quality Audit***: The term "cost of quality" actually refers to the cost of not ensuring high quality. This audit provides a way of understanding the amount of income that is lost as a result of poor quality, along with suggestions for reducing that cost and improving quality. ***Logistics Audit***: This audit includes the best practices of companies with world-class logistics systems, and suggests tools for measuring a company's performance in comparison to logistics leaders.
Environmental	***Environmental Audit:*** This audit describes how managers can determine which environmental standards should be targeted for a given organization, and provides a model for auditing performance in terms of those standards.
Social	***Corporate Identity Audit***: This audit provides insight into determining the effectiveness of a current identity, and outlines a way of assessing whether an identity should be changed, and what is the direction of those changes.
Governance	***Leadership Audit***: This is a method of determining which competencies are required for leadership success in a given organization, and presents tools for measuring the performance of the company's employees in terms of those competencies. It stresses the need to develop leadership at all organizational levels, and suggests an outline for developing personal improvement plans. ***Stakeholder Audit:*** This audit is to assess the organisation through the eyes of the stakeholders. Stakeholders usually fall into four groups: shareholders, customers, employees and suppliers. In fact, anyone interested in the success of the organisation is a potential stakeholder who have various incentives to help it, thus it pays to know them well. Each group has a different reason why they want the organisation to be successful. Shareholders want a return on their investment, customers benefit from the organisation's products or services,

	employees earn income and suppliers want to sell the organisation more. When the organisation prospers, they prosper. The organisation's stability and growth is their stability and growth, thus this is a key audit area for corporate governance. ***Strategic Alliance Audit***: This audit suggests ways of determining whether or not a particular alliance option is suitable for a given company, and provides ideas for rejuvenating alliances that may be functioning at sub-optimal levels for both manufacturing and service firms. ***Technology Audit***: This audit provides insight into determining which technologies should be priorities for a company given its strategy. It also provides tools for determining what aspects of the company can be called technologies, and a system for breaking technologies down into component parts. ***Information Security Audit***: This audit provides a framework for systematically evaluating an information system's security. ***Service Management Audit:*** This audit provides information about using service resources effectively, measuring the quality of service management, and assessing a company's ability to recover in the face of service failure. ***Corporate Longevity Audit:*** This audit is undertaken to ensure that an organisation not only maximizes the value of the existing products and services, but also simultaneously develops their replacements that will earn future income. Many companies rest on their current successes, today's breadwinners, without realizing it is only a matter of time until their current products and services are obsolete.
Empowered	***Corporate Flexibility Audit:*** This audit considers the processes in place to hire the right people the first time and get them up-to-speed as fast as possible. The checks on the systems created to bring people together (e.g. work presentations to non-related staff, office layout) and encourage good working relationships. ***Culture Audit:*** This audit provides a tool to uncover a company's culture, and provides tips on using that understanding to implement change more effectively. ***Productivity Audit***: This audit explains the complexity of the productivity concept, and discusses the evaluation of productivity in a strategic context. This increases the chances of increasing productivity in real terms, rather than improving efficiency at the expense of strategic goals.

Due to such a wide scope as seen by Figure Six, strategic audit issues are pertinent to management accountants, business analysts, audit directors, senior managers and executive-level management, as well as those aspiring to become someone who oversees audit, security, compliance and control functions. Similarly, Strategic Audits could not only dwell on highly technical matters, but also provide management and other stakeholders a perspective on information systems and technology issues at the strategic level. This will in turn promote good corporate governance by enabling managers to make well-informed planning and resource decisions that will ultimately enhance the value of the organisation.

Summary

The strategic use of information technology has caused significant changes in business; however, the accounting profession remains committed to a by-gone industrial-era economic development model. For example, there should be no controversy within the field of accounting and financial reporting that issuers of financial statement should provide the readers of financial statements with all material information that is both relevant and reliable. The relevance of intangibles has not usually been questioned, but the reliability of valuations of intangibles has often been questioned.

The profession can remain committed to fine-tuning the debits and credits of this by-gone era; or work closely with technical departments of professional firms and university accounting faculties, to research on how accountants could provide decision support information in competitive environments. This change in paradigm is inessential in a global sense, if accountants are to regain their role as one of the key drivers of the knowledge engine in an information-age economy.

We have argued that an organisation should measure value beyond its economic (financial) performance, and help managers integrate processes and resources into the organisation's overall success—an essential step toward competing in a knowledge-based environment. Just as traditional accounting tools helped managers accumulate and allocate an organisation's financial resources, a new conceptual framework is required for measuring and managing its capabilities, including its intellectual capital.

These capability measurements extend to measures of how ‘externalities’ in terms of environmental and social factors affect economic value. Finally, it is argued that knowledge and information is of no economic value unless it is used to *create value*. In today’s globalised business environments such value is created by motivated knowledge worker employees, working in a shared ownership culture who understand the information that is presented to them and are motivated by this understanding. There is no doubt a CFO must be up to the task of championing the new culture. The CFOs in the companies that have implemented the changes demanded by this emerging “influentional-economic era” have found the work fulfilling and exhilarating. To a large degree, the open-book empowerment culture is flourishing at their companies because of their efforts and commitment.

Once such new measures and reports are devised, there arises the need to audit them. However, auditors face a multiplicity of demands from diverse users of audited accounting reports. These demands appear to keep extending the role of the auditor. In order to ensure that a claim for damages is not made by any or all of the multiple-users of audited financial statements, auditors try to conduct an extensive audit in order to fulfil all such perceived duties and responsibilities. Despite this, large claims have been made against auditor by liquidators; due to the belief that auditors have "deep pockets".

The dynamics of the audit environment are also affected by the amount of tendering taking place in order to win the audit. This has resulted in audit firms quoting low prices to win jobs. Thus, the above twin pressures have resulted in auditors trying to provide a fixed and high level of service expected from their many direct and indirect customers, at a low tendered price. Such a budget driven audit carries with it high *professional risks* for the auditor.

This paper has argued that if the audit price is to be flexible, so must be the extent of the audit service. To make flexible the current fixed expectations of its customer base, it is suggested that the auditor conducts marketing research into the requirements and sensitivities of the shareholders of each corporate client. This paper also highlights the importance of future oriented strategic auditing and how the various types of strategic audits have implications for attesting the strategic capability values of the organisation as a going concern.

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