EXTENDED PERFORMANCE REPORTING FRAMEWORK: A FORM OF SUSTAINABILITY REPORTING

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ABSTRACT

There have been growing concerns over the limitations of traditional financial reporting. This paper briefly reviews three reporting approaches, namely the intellectual capital, balanced scorecard and social and environmental reporting. The paper demonstrates that the theoretical emphases of these reporting approaches are complementary to one another. It argues that integration of these will overcome several limitations of the traditional financial reporting. This paper develops an extended performance reporting framework, which is the result of such integration and is expected to provide a more complete account of the value and performance of a business. It provides both economic and non-economic performance information. It is argued that the extended performance reporting framework developed in this paper can be a form of sustainability reporting.

Keywords
Annual Reporting; Intellectual Capital; Balanced Scorecard; GRI Sustainability Reporting Guidelines; Sustainability Reporting
1. INTRODUCTION

The recent string of accounting scandals (e.g. Ansett, Enron, HIH, One.Tel, Worldcom) has drawn greater attention worldwide to the limitations of the traditional financial reporting framework (see, Barsky et al 2003, Fairlamb et al 2002). This framework has been criticised as inadequately presenting the strengths and weaknesses of a business (Department of Industry Science and Resources (DISR) 2001, p. 11), and sacrificing relevance for reliability and objectivity (Johnson and Kaplan 1987). Prior research has shown that financial accounting information has lost its relevance significantly in the last few decades (Canibano et al 1999). Many strategic intangible resources that are increasingly important in the rise of knowledge-based economy are not accounted for in the traditional balance sheet (see, Cordon 1998, DISR 2001, p. 11, Edvinsson and Malone 1997, p. 1, Guthrie 2001, pp. 29-30, Leadbeater 1999, p. 17, Norreklit 2000).

Furthermore, the movement towards sustainable development has underlined the criticism that has long been put forward - that the traditional financial reporting framework gives only an incomplete account of business activities (e.g. Estes 1976, Gray et al 1993, Gray et al 1996, Mathews 1997). Gray et al (1996, p. 2) indicate that economic activity is producing an increasing number of environmental and social problems; and that these consequences are not reported under the traditional financial reporting framework.

In summary, the traditional financial reporting framework confines itself to monetary items and to providing information for economic performance based decision-making. Various bodies of research have focused on reporting information that is not provided under the traditional financial reporting framework. In this paper the focus is on three reporting approaches: the intellectual capital (IC), balanced scorecard (BSC) and social and environmental (SE) reporting. However, the reviews of these three literatures demonstrate that, although the focuses of these bodies of research vary, they also often overlap or are complementary. It is therefore argued that the theoretical emphases and reporting elements of the frameworks that have been developed in those literatures should be integrated.
This paper develops an extended performance reporting framework (EPRF), through that integration. The proposed framework provides information on both economic (other than the traditional financial measures) and non-economic performance. It enables organisations to provide a more complete account of their business value and performance.

This paper is organised as follows. Section 2 briefly reviews and discusses the three reporting approaches, namely the IC, BSC and SE reporting. Section 3 provides a brief description of stakeholder theory, which provides a theoretical basis for the integration of theoretical emphases of the three reporting approaches. Section 4 outlines the development of the EPRF. Section 5 concludes this paper.

2. AN ALTERNATIVE TO TRADITIONAL FINANCIAL REPORTING
There are significant bodies of research that focus on providing information that is not currently provided under the traditional financial reporting framework. As indicated above, this paper focuses on the IC, BSC and SE reporting.

IC Reporting
Guthrie and Yongvanich (2004) have provided more detailed comparisons of the various IC frameworks, and these are summarised here in Table 1.

|Insert Table 1 about here|

One of the observations made by Guthrie and Yongvanich (2004) is that these IC frameworks continue to remain focused on economic performance and need to be further developed. In addition, the theoretical emphasis of the IC research and IC frameworks has been on employees as key creators of a company’s IC (see, Sveiby 1997).

The BSC Reporting
Developed by Kaplan and Norton, the BSC is intended to provide organisations with a balanced list of both financial and non-financial measures for tracking both short-term and long-term performance (Kaplan and Norton 1996). It supplements financial with non-financial measures from three perspectives - the customer’s perspective, the
internal-business-process perspective and the learning and growth perspective - to help ameliorate problems that arise from focusing exclusively on financial measures. The financial perspective includes traditional financial measures. The customer perspective measures how well the organisation is creating and delivering products and services that are valued by customers (e.g. customer satisfaction, retention) (Kaplan and Norton 1996). The internal-business-process perspective is focused on the internal processes that will deliver objectives established for current and future customers and shareholders (Kaplan and Norton 1996). The learning and growth perspective includes measures relating to employees, systems that facilitate learning and knowledge creation, and climate for action (Kaplan and Norton 1996). The BSC and its elements are shown in Table 2 below.

[Insert Table 2 about here]

It has been suggested that the BSC can be used to manage IC (Johanson et al 2001a, 2001b); and that in many respects the BSC appears to be similar to various IC frameworks. However, when closely examined, the BSC possesses different strengths and weaknesses as compared to the various IC frameworks and is underpinned by different theoretical premises. The BSC framework is based on Porter’s (1980, 1985) industry and competitor analysis (Kaplan and Norton 1996). It involves choosing the market, identifying the critical internal processes that an organisation must excel at and selecting internal capabilities required for meeting the firm’s internal, customer and financial objectives (Kaplan and Norton 1996). The BSC emphasis is on customers and the critical internal processes. This is in contrast to the IC literature, which is predominantly based on theories of firms that consider strategic internally generated intangible resources as important sources of competitive advantage (i.e. resources-based theory and knowledge-based theory) and considers employees as the key creator of a firm’s IC (see, Sveiby 1997). However, it is observed that both the IC and BSC literatures remain focused on supplementing information that is not currently provided under the traditional financial reporting framework for economic performance based decision-making.
**The SE Reporting**

This reporting approach focuses on reporting non-economic performance. It has been widely acknowledged that the impact of companies on society is not just limited to economic, but also extends to environmental and social outcomes. Therefore, to focus solely on economic performance is deemed to be too narrow. There has for a long time been a call for the benchmarking of company performance against non-financial aspects, such as environmental and social performance (e.g. Bedford 1965, Estes 1976). Heard and Bolce (1981) have indicated that societal expectations are no longer confined to profit generation and the provision of goods and services. The importance of reporting SE performance has attracted greater attention by the report of the World Commission on the Environment and Development (WCED), *Our Common Future*, in 1987, which put sustainable development firmly onto the international political agenda (Elkington 1998, p. 55).

A plethora of environmental reporting guidelines and social accounting guidelines have been released (see, Environment Australia 1999, McIntosh et al 2003). This paper chose the GRI Sustainability Reporting Guidelines 2002 as a framework from which SE performance indicators will be integrated. The GRI Sustainability Reporting Guidelines 2002 and its performance indicators are shown in Table 3 below.

[Insert Table 3 about here]

This table illustrates that, in this framework, the reporting of economic performance remains mostly limited to the elements of the traditional financial reporting framework, although GRI (2002, p. 46) indicates that its intention is to ultimately extend this reporting beyond the traditional financial indicators. Value creating activities that enable the reader to visualise the potential value that can be created and will contribute to tentative monetary flow between the organisation and its stakeholders are not present.

In summary, it is concluded that the focuses of IC, BSC, and SE reporting are diffuse and partial, but complementary to one another. It is argued that the theoretical emphases and reporting elements of IC frameworks, the BSC, and SE reporting framework should be integrated. To do so would address two significant limitations of
the traditional financial reporting framework indicated earlier. An extended performance reporting framework (EPRF) resulting from that integration brings together the focuses and strengths of the three reporting approaches, thus enabling companies to provide important information about value-creating activities and non-economic performance, and enabling companies to provide a more complete account of their business value and performance. The EPRF comprises information that enables a better understanding of economic, environmental and social performance of the company. The extended performance reporting is, therefore, argued to be a form of sustainability reporting.

3. STAKEHOLDER THEORY

As discussed above, the three reporting approaches are partial and diffuse. This section reviews stakeholder theory to provide a theoretical basis for the case for combining perspectives and elements of these reporting frameworks.

Prior research (Deegan 2000, Hasnas 1998, p. 25, Jones 1995) has criticised the term “stakeholder theory” as confusing because it has been used to refer to a range of theories with different aims and assumptions and that address a variety of issues associated with relationships with stakeholders. Deegan (2000) indicates that stakeholder theory can be broadly divided into two branches: the ethical (normative) branch; and the managerial branch.

The ethical or normative branch of stakeholder theory argues that all stakeholders have the right to be treated in a fair way by a company. According to this branch of stakeholder theory, management must give equal consideration to and balance the sometimes-conflicting interests of all stakeholders (Hasnas 1998). Within the normative branch of stakeholder theory, a stakeholder is defined as “any group or individual who can affect or is affected by the achievement of the firm’s objectives” (Freeman 1984, p. 46). Within this branch of stakeholder theory, disclosures are assumed to be responsibility driven, rather than demand driven (Deegan 2000).

The managerial branch of stakeholder theory describes how the expectations of particular stakeholder groups may have more (or less) impact on corporate strategies (Deegan 2000). The organisation will not respond to all stakeholders equally, but to
those that are deemed to be more powerful (Deegan 2000). The greater the importance of stakeholder resources to the continued viability and success of the organisation, the greater the probability that the particular stakeholder’s expectations will be addressed (Deegan 2000; Ullmann 1985). Deegan (2000) indicates that stakeholders’ demands encompass provision of information about the activities of the organisation. Various activities, including public reporting, will be directly related to the expectations of particular stakeholder groups (Deegan 2000). Whether a particular stakeholder receives information will be dependent upon how powerful they are perceived to be (Deegan 2000).

Deegan (2000), however, indicates that considering the two branches of stakeholder theory separately is only likely to give a partial view. This study employs perspectives of both branches of stakeholder theory. In sum, stakeholder theory explains the meaning of stakeholders and that organisations must seek the support and approval of the stakeholders for their continued existence and adjust their activities to gain that approval (Gray et al 1995). This underlines that information can be a major element that companies may employ to manage their stakeholders in order to gain their support (Deegan 2000; Gray et al 1996). Based on stakeholder theory, it is expected that companies tend to report information that they perceived to be important to stakeholders. This provides a theoretical basis for reporting information on issues that are perceived to be important to a broader group of stakeholders and thereby combining IC, BSC and SE reporting in the next section. The emphasis that the BSC places on customers and internal processes complements the emphasis on human capital in the IC literature and that on society in the SE reporting. The complementary emphases of IC frameworks, the BSC and the SE reporting, which when integrated will strengthen the components of one another, is shown in Figure 1 below.

[Insert Figure 1 about here]

With the recent accounting scandals, the knowledge-based economy, and the movement towards sustainable development, this paper argues that, to obtain stakeholders’ support and approval, companies must seek to report their economic, environment and social performance in their reports, and to ensure that information about economic performance should not be limited to information that is currently
provided, or can be derived from, the traditional financial reporting framework. That is, strategic intangible resources that have gained in significance in recent times, and the environmental and social impacts that they may have, should be reported.

4. DEVELOPMENT OF AN EPRF

The development of the proposed EPRF is divided into three parts. However, only the first part will be discussed in greater detail in this paper. The first part involves establishment of the main categories of the proposed EPRF. This part discusses the strengths and weaknesses of IC frameworks, the BSC, and SE reporting approaches and establishes grounds for the main categories of the proposed EPRF. The second part involves integration of elements of IC frameworks and the BSC. This part is to provide a detailed examination of reporting elements suggested in various IC frameworks and the BSC and a classification of these reporting elements into each of the three categories of the proposed EPRF. The third part involves integration of non-economic performance indicators of the GRI Sustainability Reporting Guidelines 2002 into the framework developed in the second part. The purpose of this part is to incorporate non-economic performance information and some additional elements into the proposed EPRF. The EPRF is shown in Figure 2 below.

[Insert Figure 2 about here]

4.1 Establishment of the main categories of the proposed EPRF

In order to establish the main categories of the proposed EPRF, it is important to identify some of limitations inherent in various IC frameworks, the BSC, and SE reporting. First, IC frameworks have been criticised as being not fully exhaustive and exclusive and need to be further developed (Grojer 2001, p. 708). Roslender and Fincham (2001, p. 392) have suggested that the content of intellectual capital accounts should be of interest to various stakeholders. Second, classifying IC into three general categories of IC does not depict relationships among them. However, it also should be noted that the cause-and-effect relationships in the BSC have attracted criticism. Third, the BSC has been criticised as being “skewed” and draws management attention to the internal-business-process perspective (Bukh et al 2002, pp. 25-6). Fourth, the definition of each perspective is poorly specified, which makes the boundaries between these perspectives ill-defined, especially between the internal-
business-process perspective and the learning and growth perspectives (Grojer 2001, pp. 707-8). How each of these limitations impacts the way the main categories of the proposed EPRF are established is described below. Finally, the SE reporting, while acknowledging the importance of reporting non-economic performance information, insufficiently addresses limitation of reporting of economic performance.

In response to the first criticism, this paper develops an EPRF through integration of elements from various IC frameworks, the BSC and the GRI Sustainability Reporting Guideline 2002. The different emphases of each of the three reporting approaches are brought together as discussed earlier. It is noted here that this offers an alternative way to further develop IC frameworks through an attempt to incorporate non-economic performance into the proposed EPRF. As indicated previously, it has been suggested that measuring companies’ performance against the financial bottom line is insufficient (e.g. Elkington 1998).

In response to the second issue, this paper considers the relationships among the three general categories as being too complicated to establish the inter-relationships between them, if possible at all. In other words, this thesis does not attempt to resolve this limitation, but leaves it to organisations to try to depict them in their narrative and sketch strategy. Trying to draw connection among them will only attract criticism, similar to that leveled at the cause-and-effect relationships in the BSC.

Prior research (e.g. Grojer 2001) has criticised the definitions of each perspective of the BSC as poor, particularly those of the internal-business-process and the learning and growth perspectives. Bontis et al (1999) also pointed out that employee competence and information technology are both classified under the learning and growth perspective. The internal-business-process perspective in the BSC comprises innovation, operations and the post-sales service processes, with emphasis placed on quality, time and cost measures of these processes. This criticism may result from that a different theoretical perspective that focuses on internally developed resources (e.g. the concept of core competencies, resources-based theory or knowledge-based theory) is employed when looking at the issue.
Bontis et al (1999) indicate that the manner in which the BSC lumps human competence and information technology together in the learning and growth perspective underestimates the specific challenge of managing people and their knowledge. Reflecting on knowledge-based theory, Sveiby (1997) sees human capital as the value driver of firms. Roos et al (1997) argue that human capital, which requires management that is different from management of other assets, should be separated as a category on its own. Therefore, it is argued that from the concept of core competencies perspectives and resources-based and knowledge-based theories, human capital should have its own category in order to highlight and reflect different characteristics and approaches in managing such resources from others.

As indicated earlier, Bukh et al (2002) reported and criticised that the BSC is “skewed” and draws most attention towards improvement of internal processes. While Bukh et al (2002) attribute the focus on operational excellence of the sample firm’s strategy map to company-specific history and interests, it can be argued that this may also result from the fundamental that the BSC relies on. Porter’s (1980, 1985) concept of strategy focuses on industry structure, rather than internal unique capabilities. As a result, internal capabilities such as human competence, information technology and climate for action are all placed under the learning and growth perspective while the internal-business-process perspective is specifically devoted to time, cost and quality measures of the process along the value chain. However, as discussed above the human capital should have its own category. The climate for action, which now is called “quality of workplace” in this paper, should also be considered as part of human capital because it is the climate that motivates employees to use their skills and abilities to benefit the company. Roos et al (1997) indicate that companies need employees who both possess knowledge and skills and are willing to use their knowledge and skills.

The discussion above is provided to elaborate the reasons why the proposed EPRF is deemed to comprise external capital, internal structure and human capital. These three main categories of the proposed EPRF are considered sufficient to accommodate elements of the three reporting approaches. Integration of elements of various IC frameworks and the BSC would improve limitations of the traditional financial reporting framework and also of the SE reporting approach in providing information
about financial and economic performance. The next section will progress onto the second part of the development of the proposed EPRF.

4.2 Integration IC frameworks and the BSC

Both IC frameworks and the BSC appear similar, comprising internal capital or internal-business-process perspective; external capital or customer perspective; and human capital or learning and growth perspective. However, upon a closer examination of these perspectives in the BSC and IC frameworks, it becomes clear that most elements under each perspective or category are sometimes different and sometimes overlapping. Bukh et al (2002), in their comparison between the BSC and IC statements of a software company, pointed out that the two statements reported different indicators, while some indicators, such as customer and employee satisfaction, average days of education, and employee turnover, appeared in both the IC statement and the BSC. Therefore, in formulating the proposed EPRF, common elements were firstly drawn out of the various IC frameworks and then compared to the elements within the BSC framework.

Integration of elements of “external capital”

It is observed that both IC frameworks and the BSC contain elements that reflect the company’s relationship with its customers. However, it should also be noted that Roos et al (1997) extend relationships to cover the company’s relationship with various stakeholders and that external capital of the proposed EPRF comprises customer relations and society relations. However, at this stage, the integration focuses only on those items related to customer relations.

The elements of external capital are: customer satisfaction; customer longevity; customer retention; brand; distribution channel; product quality; improved or additional services; customer base; market share; win sales contracts; joint venture and alliance; customer profitability; customer relationship; and pursuit of new market opportunities or commercialisation.

Integration of elements of “internal structure”

Information technology is considered as one sub-category of the internal structure of the proposed EPRF. Information technology is a part of the structural capital/internal
structure in all four IC frameworks and clearly does not fit into the external structure. Furthermore, human capital should have its own separate category to reflect its unique importance, as suggested by different theories of the firm (i.e. resources-based and knowledge-based theories), and to highlight the various requirements in managing this type of strategic resource. The elements of information technology are determined on the basis of those identified by Brooking (1996). Information technology comprises the ability of the company to use its database of information, networking, communication systems, and the internet to facilitate their operations.

Each of the IC frameworks differently classifies the elements that represent the innovative capacity of companies. Brooking (1996) separates intellectual property from infrastructure assets. Edvinsson and Malone (1997) and Roos et al (1997) consider innovation capital as part of their structural capital, but Roos et al. (1997) differentiate between those that are being developed and those that have been developed. Sveiby (1997) considers patents, research and development (R&D), and investment in new methods and systems as part of internal structure. This paper establishes internal work processes and innovative processes as two separate sub-categories within internal structure. The BSC, whose theoretical foundation emphasises customers and critical internal business processes, uses the generic value-chain model as a template that companies can customise in preparing their internal-business-process perspective. The generic value-chain model considers the internal business processes as being composed of the innovation processes, operations processes, and post-sales service processes. This paper considers the generic value-chain model as a helpful way of understanding the internal processes inside companies. Recognising the distinctiveness of the innovative processes and other work processes inside companies, this paper considers the “innovative processes” as another group of the internal structure that reflects those elements that involve the innovativeness of companies. The operations and post-sales service processes are both considered routine internal work processes. They, therefore, are collapsed together as the internal work processes. It should be noted at this stage that the internal structure will include the corporate governance structure, which will be integrated from the GRI Sustainability Reporting Guidelines 2002; and this will be done in the last part of the development of the proposed EPRF.
Integration of elements of “human capital”

Roos et al (1997) have highlighted that companies need employees who not only possess knowledge and skills, but who are also willing to use these assets to benefit the company, and who can motivate the whole company to reach the set goals. This observation is consistent with Kaplan and Norton (1996), which incorporate “motivation, empowerment, and alignment” into the learning and growth perspective. Therefore, the human capital includes elements that indicate the knowledge and skills of employees, as well as an indication of how employees may use their knowledge and skills to benefit the company (i.e. the capacity and willingness to act). This category also includes elements that indicate workplace quality, which can have an impact on employee perception of their company.

Measures of the capacity and willingness to act include employee competence, employee satisfaction, employee retention, employee absenteeism and employee productivity and profitability. The elements of workplace quality integrated from IC frameworks and the BSC are, at this stage: organisational culture; rewards, performance measurement system and alignment; training and education. Information technology is re-classified into internal structure. Organisational culture, which some IC frameworks classify as an element of internal structure, is re-classified into this category, as discussed earlier.

Integration with the GRI Sustainability Reporting Guidelines 2002

The part of the proposed EPRF involves the integration of environmental and social performance indicators from the GRI Sustainability Reporting Guidelines 2002 into the framework developed in the first part. As discussed earlier, companies can have economic, environmental and social impact on society, in addition to providing products and services to customers. Their external stakeholders, therefore, should not be limited to customers, but should include everyone in society who may be at the receiving end of the economic, environmental and social impact of the activities of these companies. It also involves the addition of elements of both the internal work processes and the innovative processes as a result of the broadening definition of corporate performance to include environmental and social performance and elements of the corporate governance structure, which is a key component in pursuing
sustainable development (International Institute for Environment and Development (IIED) 2002).

In addition, customers are also members of society. Customers may tend to prefer to purchase products and services from environmentally friendly and socially responsible companies. Hence, the non-economic interests of customers must also be taken into account in addition to the attention normally given to customers’ consumption and financial interests. Thus the external capital category of the proposed EPRF includes the various relevant stakeholders, who are collectively referred to as “society”, and upon whom companies may have an effect economically, environmentally and socially. Therefore, the external capital of the proposed EPRF comprises two sub-categories, namely “customer relations” and “society relations”.

The proposed EPRF will seek to include a set of measures that indicate how well the company performs to meet society’s expectations regarding the economic, environmental and social impacts. This will be achieved through the integration of the GRI Sustainability Reporting Guidelines’ 2002 economic, environmental, and social performance indicators into the proposed EPRF. However, as indicated earlier, the core indicators on economic performance are often those that are currently provided, or can be derived from various components reported, under the traditional financial reporting framework. As this paper focuses on information that is not currently provided by or cannot be derived from the traditional financial reporting framework, the economic performance indicators of the GRI Sustainability Reporting Guideline 2002 are excluded from the integration.

Customer relations are considered separate from society relations because they capture different aspects of a company’s relationships with, and different aspects of a company’s impact on, customers and other stakeholders. In addition, there may sometimes be a conflict between the objectives of building relationships with customers and with other stakeholders. It is also noted that many stakeholders tend to play a number of different stakeholder roles such as employees, suppliers, capital providers and customers. Customer relations are intended to capture the traditional relationship with customers who buy products and services from the company, while society relations are intended to capture the company’s relationship with various other stakeholders.
stakeholders, each as a member of society, on whom the activities of companies have economic, environmental, and social impact.

The environmental and social performance indicators of the GRI Sustainability Reporting Guidelines (2002) are incorporated into the society relations category. However, a group of elements in the social performance dimension (i.e. labour practices and decent work) of the GRI Sustainability Reporting Guidelines (2002) are re-classified into the human capital’s “quality of workplace” sub-category to which they are more closely related. All elements of the GRI Sustainability Reporting Guidelines’ (2002) environmental performance indicators are integrated into the society relations sub-category. Although the products and services group of elements of the environmental performance indicators and product responsibility group of elements of the social performance indicators are of interest to customers, they are also environmentally and socially related concerns. Therefore, both aspects remain as they are originally categorised in the GRI Sustainability Reporting Guidelines (2002). This is because not all customers pay particular attention to the environmental impact of products and services and product responsibility of the company, while others who are not directly impacted by the environmental consequences of a company’s actions may nevertheless be interested in these consequences.

The labour practices and decent work group of elements of the social performance dimension were re-classified and located under the quality of workplace sub-category within human capital. Since good labour practices and decent work, which create a good working environment, can affect employee satisfaction and attitude towards workplace, customers and superiors, they are classified within the same sub-category as organisational culture and considered as part of the quality of workplace in the human capital category.

Interestingly, GRI (2002, p. 51) classifies some aspects of labour practice that relate to human rights as elements of the human rights of the social performance dimension, and indicates that the reason for this decision is that there is a fundamental difference in the purpose between the two indicators. While the human rights elements help

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1 The economic performance measures are included in the financial and economic performance perspective, which is excluded from the checklist for the reason explained earlier.
assess how a reporting organisation helps protect and respect basic human rights, labour practices and decent work measures address the question of how a reporting organisation enhances the quality of the working environment and value of the relationship to the worker (GRI 2002, p. 51). Therefore, in our framework, we maintain the labour practices that relate to human rights as a group of elements within the social performance, because they reflect how an organisation maintains and respects the basic rights of a human being.

Since corporate performance is broadened to include environmental and social performance, the innovative processes should also include research for improving HSEC performance. In addition, Deegan (1999, p. 40) indicates that: “Sound triple bottom line performance requires longer-term vision. It is imperative that the corporate governance structure of the business includes formal mechanisms for monitoring not only the economic but also the social and environmental performance of the entity. The key concepts of sustainability must be embraced at the broad room level”. Therefore, the corporate governance structure of the GRI Sustainability Reporting Guidelines 2002 is also integrated into the internal structure of the proposed EPRF.

4. CONCLUSION
This paper has sought to suggest an alternative approach to resolving the limitations of the traditional financial reporting framework. It has developed an EPRF, which is argued to be a form of sustainability reporting. In the discourse of sustainability reporting, there is much discussion about what sustainable development in fact means (WBCSD 1999a, p. 3), and how sustainability reporting should look (Deegan 2002, p. 289). As indicated earlier, Elkington (1998) and WBCSD (1999b) indicates that sustainable development “involves the simultaneous pursuit of economic prosperity, environmental quality and social equity”. Therefore, it can be concluded that sustainability reporting must cover reporting on information across the three dimensions – economic, environmental, and social. It is, therefore, argued that the reporting framework developed in this paper can be a form of sustainability reporting.

This paper contributes to the three extended reporting literatures. The EPRF developed in this paper brings together the strengths of the frameworks developed in
the three extant literatures. It broadens the focus of the IC and BSC literatures on economic performance, to encompass non-economic performance measures. It supplements the SE reporting approach with information on value creating activities that enable the reader to visualise the potential value that can be created and will contribute to tentative monetary flow between the organisation and its stakeholders.

The proposed EPRF supplements financials with non-financials about value creating activities and non-economic performance within the external capital, internal structure and human capital of an organisation to enable information users to visualise better the sources of competitive advantage and sustainability of the organisation, and enabling the organisation to provide a more complete account of their business value and performance. However, it is important to note that the proposed EPRF is not claimed to be exhaustive, but rather as a part of the construction and re-construction process in developing a reporting framework that aims to resolve limitations of the traditional financial reporting framework.
### Tables and Figures

#### Table 1. Comparisons of four IC frameworks - common features and components

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<td><strong>Market assets</strong></td>
<td><strong>Structural capital – Customer capital</strong></td>
<td><strong>Structural capital – Relationships</strong></td>
<td><strong>External structure</strong></td>
<td><strong>External/customer capital</strong></td>
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<tr>
<td>Brands, customers and their loyalty and good distribution channels, favourable contracts, and various agreements such as licensing and franchise agreements.</td>
<td>Customer satisfaction, longevity, price sensitivity, financial well-being of long-term customers.</td>
<td>Relationships with customers, suppliers, alliance partners, shareholders and other stakeholders.</td>
<td>Relationships with customers and suppliers; encompasses brand names, trademarks and the company’s reputation and image.</td>
<td>Various IC frameworks concentrate on relationships between the company and its customers. However, Roos et al. (1997) extend relationships to cover relationship with various stakeholders.</td>
</tr>
<tr>
<td><strong>Infrastructure assets</strong></td>
<td><strong>Structural capital – Organisational capital – Process capital</strong></td>
<td><strong>Structural capital – Organisation</strong></td>
<td><strong>Internal structure</strong></td>
<td><strong>Internal/infrastructure capital</strong></td>
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<td>Technologies, methodologies and processes which enable the organisation to function, which include management philosophy, corporate culture, information technology systems, databases of information on the market or customers, methodologies for assessing risk, methods of managing a sales force, financial structure, networking systems, communication systems such as email, teleconferencing, and the ability to</td>
<td>Work processes, techniques (such as ISO 9000) and employee programs that augment and enhance the efficiency of manufacturing or the delivery of services.</td>
<td>All intellectual property assets, any activity inside the company that contributes to the creation of organisation capital and organisational culture.</td>
<td>Patents, concepts, models, computer and administrative systems, and corporate culture.</td>
<td>Various IC frameworks similarly classify internal work processes as one source of company value. Mainly this category captures work processes, information technology systems, corporate culture, management philosophy.</td>
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<tr>
<td>Intellectual property</td>
<td>Structural capital — Organisational capital — Innovation capital</td>
<td>Structural capital — Renewal and development</td>
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<td>Patent, copyright, design rights, trade secrets, know-how, trade marks, service marks.</td>
<td>Renewal capability and the results of innovation such as protected commercial rights, intellectual property and other intangible assets and talents used to create and launch new products and services.</td>
<td>All the items that have been built or created and that will have an impact on future value, but have not manifested that impact yet such as new patents filed.</td>
<td>Most authors incorporate intellectual property assets into the internal/infrastructure capital. Roos et al. (1997) differentiate between those that are being developed and those that were developed.</td>
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<thead>
<tr>
<th>Human-centred assets</th>
<th>Human capital</th>
<th>Human capital</th>
<th>Employee competence</th>
<th>Human capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education, vocational qualifications, work related knowledge, occupational assessments, psychometrics, work related competencies.</td>
<td>The combined knowledge, skill, innovativeness, ability of employees, company’s value, culture and philosophy.</td>
<td>Competence, attitude and intellectual agility.</td>
<td>Employee competence or capacity to act in various situations to create both tangible and intangible assets.</td>
<td>Various authors commonly classify employees’ knowledge and skills of employees into this category.</td>
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<td>Table 2. The BSC</td>
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<tr>
<td><strong>Categories</strong></td>
<td><strong>Financial measures that reflect:</strong></td>
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<tr>
<td>Financial perspective</td>
<td>- Revenue growth and mix;</td>
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<td></td>
<td>- Cost reduction/productivity improvement;</td>
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<td></td>
<td>- Asset utilisation/investment strategy.</td>
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<tr>
<td>Customer perspective</td>
<td><strong>Core outcome measures:</strong></td>
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<td></td>
<td>- Market share;</td>
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<td></td>
<td>- Customer retention;</td>
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<td>- Customer acquisition;</td>
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<td>- Customer satisfaction;</td>
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<td>- Customer profitability.</td>
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<td></td>
<td><strong>Customer value propositions:</strong></td>
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<td></td>
<td>- Product and service attributes (e.g. price, quality, product/service);</td>
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<td></td>
<td>- Customer relationship (e.g. the delivery of product/service to customers);</td>
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<td></td>
<td>- Image and reputation (e.g. how a company defines itself for its customers or brand).</td>
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<tr>
<td>Internal-business-process perspective</td>
<td><strong>The innovation process comprises two groups of measures: (1) measures for basic and applied research; and (2) measures for product development.</strong></td>
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<td><strong>Measures for basic and applied research:</strong></td>
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<td></td>
<td>- Percentage of sales from new products;</td>
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<td>- Percentage of sales from proprietary products;</td>
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<td>- New product introduction versus competitors’ and also new product introduction versus plan;</td>
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<td></td>
<td>- Manufacturing process capabilities (e.g. density of chips that could be produced on a silicon wafer);</td>
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<td>- Time to develop next generation of products.</td>
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<td><strong>Measures for product development:</strong></td>
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<td></td>
<td>- Time to market; and</td>
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<td></td>
<td>- Break-even time.</td>
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<td><strong>The operations process:</strong></td>
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<td></td>
<td>- Time, quality and cost measurements of operating processes.</td>
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<td><strong>The post-sale service process:</strong></td>
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<td>- Time, quality and cost measurements of billing, collection and dispute resolution processes;</td>
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<td></td>
<td>- Performance measures associated with the safe disposal of waste and by-products from the production process.</td>
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<tr>
<td>Learning and growth perspective</td>
<td><strong>Employee capabilities:</strong></td>
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<td></td>
<td>- Employee satisfaction;</td>
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<td>- Employee retention;</td>
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<td>- Employee productivity.</td>
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<td></td>
<td><strong>Situation-specific drivers of learning and growth:</strong></td>
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<td></td>
<td>- Re-skilling the workforce;</td>
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<td>- Information system capabilities;</td>
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<td></td>
<td>- Motivation, empowerment and alignment.</td>
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</table>

Source: Summarised from Kaplan and Norton (1996)
<table>
<thead>
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<tr>
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<td>Suppliers</td>
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<td>Employees</td>
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<td>Biodiversity</td>
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<td>Emissions, effluents and waste</td>
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<td>Suppliers</td>
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<td>Products and services</td>
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<td>Transport</td>
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<td>Overall</td>
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<td>Social</td>
<td>Labour practices and decent work</td>
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<td>Employment</td>
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<td>Labour/management relations</td>
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<td>Strategy and management</td>
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<td>Freedom of association and collective</td>
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<td>bargaining</td>
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<td>Child labour</td>
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<td>Forced and compulsory labour</td>
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<td>Disciplinary practices</td>
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<td>Security practices</td>
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<td>Indigenous rights</td>
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<td>Society</td>
<td>Community</td>
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<td>Bribery and corruption</td>
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<td>Political contributions</td>
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<td>Competition and pricing</td>
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<td>Product</td>
<td>Customer health and safety</td>
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<td>responsibility</td>
<td>Products and services</td>
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<td>Advertising</td>
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<td>Respect for privacy</td>
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</table>

Figure 1. Integrated emphases in IC, the BSC, and SE reporting frameworks

Note: Emphasis by individual framework in bold.
Figure 2. Extended performance reporting framework

EPRF

External Capital

Customer relations
- Customer satisfaction
- Customer longevity
- Customer retention
- Brand
- Distribution channel
- Good product quality
- Additional or improved services
- Customer base
- Market share
- Win sales contracts
- Sales volume
- Pursuit of new market opportunities/commercialisation
- Joint venture and alliances
- Good customer relationship

Society relations
- Environmental performance indicators:
  - Materials
  - Energy
  - Water
  - Biodiversity
  - Emissions, effluents and waste
  - Suppliers
  - Products and services
  - Compliance
  - Transport
  - Overall
- Social performance indicators:
  - Human Rights
  - Strategy and management
  - Non-discrimination
  - Freedom of association and collective bargaining
  - Child labour
  - Forced and compulsory labour
  - Disciplinary practices
  - Security practices
  - Indigenous rights

Internal Structure

Information technology
- Database of information
- Networking
- Communication system
- Internet

Internal work processes
- Systems, methods and technology
- Methodologies for assessing and managing risks
- Efficiency and Health, Safety, Environment and Community (HSEC) improvement program

Innovative process
- Research and development
- New product introduction and product innovation
- Time-to-market
- Trademarks
- Copyright
- Patents
- Research for improving HSEC performance

Corporate governance structure
- Board’s and major committees’ responsibility
- Independence of the board
- Process for review of the board’s composition
- Board-level processes for review of company performance and issues
- Performance-based executive compensation
- Organisation structure
- Commitment to high corporate governance standard

Human Capital

Capacity and willingness to act
- Employee competence
- Employee satisfaction
- Employee retention and turnover
- Employee absenteeism
- Employee productivity and profitability

Quality of workplace
- Organisational culture
- Rewards, performance measurement system and alignment
- Training and education
- Employment
- Labour/management relations
- Health and safety
- Diversity and opportunity

Internal work processes
- Systems, methods and technology
- Methodologies for assessing and managing risks
- Efficiency and Health, Safety, Environment and Community (HSEC) improvement program

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- Rewards, performance measurement system and alignment
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- Employment
- Labour/management relations
- Health and safety
- Diversity and opportunity
REFERENCES


Department of Industry Science and Resources (DISR), Business Competitiveness Division, 2001, Invisible Value: the Case for Measuring and Reporting Intellectual Capital, DISR, Canberra.


IIED – see International Institute for Environment and Development


