MEASURING ORGANIZATIONAL PERFORMANCE: A NEW APPROACH TO TRIPLE BOTTOM LINE REPORTING AND STAKEHOLDER ENGAGEMENT

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ABSTRACT: This study aimed to provide an enhancement to the reporting method that captures triple bottom line performance outcomes. To ensure organizational social, environmental, and economic goals meet performance objectives, I proposed a modified weight component addition using stakeholder and shareholder input. Organizational triple bottom line indicators used in the index need to be relevant to that particular organization including stakeholders and communities. I explained the sustainability reporting process from inception and added new steps in the process, which if followed produces grounded (TBL) performance outcome measures that could be used as a comparative tool and general reporting. Finally, an index report is created with internally created indicators with personal investment from both stakeholders and community partners, which has been over looked in sustainable performance practices and the current (TBL) literature.

KEYWORDS: Triple bottom line, Index, Scorecard, Sustainability performance,

INTRODUCTION

Measuring Triple Bottom Line Sustainability Performance: A Theoretical Framework

These proposed methods for measuring the triple bottom line is meant to fill the gap in current literature by constructing a theoretical framework on the triple bottom line system so to compare social capital and sustainable responsibility (Norman & MacDonald, 2004; Hubbard, 2009; Slaper and Hall, 2011; Magee et al., 2013). As seen from the triple bottom line literature there are plenty of attempts in constructing viable economic, social, and environmental measurement systems as a tool to report triple bottom line performance or to reflect true outcomes from sustainable activities (Furnish, Kay, & Xia (2013). However, we see the existing triple bottom line measurement models and systems are not comprehensive or at a level of sophistication in the new era of increasing sustainable demands from stakeholders, customers, nonprofit organizations, and communities (Slaper & Hall, 2011; Sridhar, 2012; Mitchell, Curtis, & Davidson, 2008). Organizations seeking to report on the impact of social, economic, and environmental sustainable activities, need to first incorporate an effective measurement system that is constructed based on constituencies needs (Rogers & Ryan, 2001).

This study, however, concentrates on creating meaningful additions for measuring organizations triple bottom lines that are concentrated on [social, environmental, and economic] domains and developing indicators to be used in such a way to compare with other organizations. Organizations that are engaged in (TBL) activities understand the potential of increased scrutiny from the publics in providing data on goals and initiatives and with corresponding community impact. Based on this premise, the paper asks what measuring system indicators are needed to provide data that reflects goal-attainment and comparable indicators for specific communities and its needs and goals? Because of the inconsistency in measuring triple bottom line outcomes and impacts, organizations cannot provide data that
displays a substantive impact outside of the scope of regular operational activities (Rogers & Ryan, 2001; MacDonald and Norman, 2007; Pava, 2007; Mitchell, Curtis, & Davidson, 2008). This paper examined previous methodologies used for measuring triple bottom lines, and proposed additions in which organizations that report the TBL can do so based on the stakeholders and community members input and impact expectations. That is, measures and indicators that are equally understood by all involved parties, especially, those seeking to either invest monetarily or sustainably to organizational development. Marshall and Brown (2003) found that “82% of measures were descriptive; with only 13% that had targets and only 5% were efficiency based” (p. 182). Thusly noted, Sridhar (2012) informed how there is a lack of standards for measuring performance germane to organizational social, environmental, and economic sustainability performance. This paper address the meaning of the triple bottom line, explain the balance scorecard method, explain the index method, provide a theoretical triple bottom line model, and provide methodology for creating specific indicators an weights for further TBL measurement.

The Triple Bottom Lines

The triple bottom lines, also known as, the (TBL’s or 3BL’s) have three main dimensions in which organizations seek to measure aside from the traditional financial bottom line performance (Norman & MacDonald, 2004; Hubbard, 2009; Slaper & Hall, 2011). These three dimensions often cited in the literature pertaining to the triple bottom lines are: environmental, social, and economic triple performance measures (Norman & MacDonald, 2004; Cornelius, Todres, Janjuha-Jivraj, Woods, and Wallace, 2008; Hubbard, 2009; Slaper & Hall, 2011 Furnish, Kay & Xia, 2013). The multiple bottom line concepts has advocates and critics who find that measuring (TBLs) is a necessary process that provides both shareholders and the broader community evidence of the intended impact from sustainable activities. While the literature on the triple bottom line remains sparse, organizations are affected by the non-use of (TBL’s); especially, regarding those stakeholders and communities that demand real reported sustainable results (Norman & MacDonald, 2004). Unlike other forms of measurement of organizational performance, the sustainability performance, triple bottom lines are profitable if they are uniform in approach (e.g. balance sheet and income statement), but unfortunately, this is not the case with most social, economic, and environmental sustainable initiative performance measures pertaining to the triple bottom line.

This study followed the current line of research which advocated the use of descriptive quantitative methods where the indicator of measurement can be unitized (Kaplan and Norton, 1992; Elkington, 1997; Marshall and Brown, 2003) and measured in terms of activity outcome impact in index format. This framework thrust the concept forward by proposing a new addition to the method in which to truly show and report impact of sustainable engagements that could be measured against other organizations reported triple bottom line indicators compiled into an index with incorporated indicator weights. As mentioned by Cornelius, Todres, Janjuha-Jivraj, Woods, and Wallace (2008) who stated that there is “a sizable gap in the literature needs to be addressed, namely the extent to which internal corporate social responsibility (CSR) policies and practices are evident in social enterprises” (p. 336). Additionally, Brown, Dillard, and Marshall (2006) agreed with (Cornelius et al., 2008) by stating that there has been, “Attempts to arrive at a single measure or index to allow maximization or minimization of one factor have not yet achieved universal, or even common, support” (p. 17). Can an organization effectively report their [TBL] activities in a way that is understandable, clear, and justifiable to the many shareholders and general communities that
needs this data? One major concern, along this line of thought, is the ability to streamline data, so that the data-points are useful in displaying impact for comparison to similar organizations; which thereby would be changing the sustainable performance paradigm and methods in reporting sustainability (Norman & MacDonald, 2004; Hubbard, 2009; Magee et al., 2013)

LITERATURE REVIEW

This literature review elaborates on studies that have laid a viable foundation in measuring the bottom-line for reporting sustainable performance outcomes. From the literature, it is noticeable that numerous attempts have been made and some useful methodologies in which the bottom lines could be measured and reported. In this paper, it is not the objective to examine the criteria that organizations set as performance goals. This literature review solely discusses the triple bottom line to propose a model and, measurement indicators, which are used as analytical tools to compare against other like-organizations. That is based on the notion that there is a plethora of non-uniform data points and indicators to reflect sustainable performance. Thus, the literature on sustainable performance attempts to add a model of uniformity by developing the most viable measures pertinent and specific to the organizational community, and creating reflective models for organizations that incorporate in TBL activities to confirm corporate responsibility, to increase public support, and or to create partnerships [ with either NGO’s, or social entrepreneurs].

**Sustainable Scorecard Method.**

Magee (2013) conducted a study with emphasis on the triple bottom lines becoming a centralized measurement as an in-put and out-put system. There was emphasis on the “scorecard” and how it does allow organizations to score domains of data with increased broader categories. For example, the domains are partitioned as: issues, objectives, indicators, indicator sets, relationships between issues, and data collected compared to indicators. This is an example of one of the key issues most have asked: Are there too many lines in the scorecard measurement process that would decrease the strength in the scorecard method? Also, would a scorecard system take into account initiatives that are not easily calculated into units? A scorecard system would make information quantifiable, which is usable for many activities that can be defined into specific units. However, organizational initiatives are not easily quantifiable, which eliminates the option of comparable units on a scorecard. Hubbard (2009) study examined the various ways to measure TBL input and output data using the (SBSC) Sustainable Balanced Scorecard. That study used the (SBSP) system that was initially created by Kaplan and Norton (1992) based on the stakeholder theory. This balanced scorecard has four main quadrants: customer/ market; short-term efficiency; and long-term learning and development factors. The researchers explained that the (BSC) is not solely based on the needs or wants of the direct transactional stakeholders. Thus, it is in the firms interests to measure its performance in relation to stakeholders that connects with local communities and governments with the incorporation of shared goals (Hubbard, 2009).

Woerd and Brink (2004) echoed the fact that if the scorecard is to integrate sustainability, then it needs to be further developed. A Dutch pilot study revealed the scorecard method does not allow organizations to tailor the indicators to a specific industry or communities. Thusly, Woerd and Brink, attempted in creating a more responsive scorecard that is more inclusive in reporting triple bottom lines. This new scorecard addition consisted of making the tool more
responsive with an emphasis on sustainable ambition levels from within the organizational management echelon (Woerd & Brink, 2004). Woerd and Brink stated that “traditional scorecard, the emphasis is on profit, while People and Planet play a supporting role at best” (p. 175).

**Triple bottom line Indexing method**

Hubbard (2009) expressed the same concern as (Norman and MacDonald, 2004) that advocated for the use of the TBL measures, and would like to see a more centralized system to translate data. The major concern with social impact is the costs incurred by organizations that delve into social concerns outside the scope of its organizational mission. In order for an organization to implement a successful multiple bottom line measurement system, there are three factors that ought to be considered from management’s perspective. The three factors are: strength of commitment a shareholder has on solving social issues, strength of the social paradigm adopted by management, and the strength of sustainability in the culture of the organization (Hubbard, 2009). Considering these factors (Magee et al. 2013) agreed that both qualitative and quantitative techniques are appropriate in determining a strategy for approaching and formulating a plan that measures on all three sustainable dimensions. These variables should be direct and observable and display goal attainment and goal strategy. The researcher advocated for the index indicator composite to reflect measured outcomes. This is mainly due to the nature of the social capital and internal capabilities that can be harmoniously weaved into the strategic goals and proved by the organization. The Indexing methodology closely aligns with what investors and shareholders alike often request.

Furnish, Kay, and Xia (2013) advocated for a unique measuring system that organizations can use to measure the bottom line. The first is an index development that adds a composite score based on the summation of impact per each level of the identified bottom line. The social method developed by (Reynolds and Ryan, 2006) set-up a unique indicator for the social well-being dimension, which is based on the Max-Neef (1992) concept of fundamental human needs combined with environmental impact. The researchers used the concept of economic development as a pair with input-output analysis. These methods used elements of those organizations to measure the bottom line effectively using an index to display results (Max-Neef, 1992; Reynolds & Ryan, 2006). While this method is not a one size fits all, but it is a process that needs to be studied more thoroughly but, has many positive elements for organizational results. The instrument used by Furnish et al., seemed most viable and was echoed by (Reynolds and Ryan, 2006; Ratner, 2009; Max-Neef, 1992) where each quadrant is unique to the organization in the index indicated by label, and color-coding representing various communities. On the corporate level (Knoepfel, 2001) the index reporting gives investors a way to capture the “non-financial” information into a financial analytical tool. Due to the surge of corporate investment in sustainable efforts, indexing data allows investors to screen portfolios, rate benchmarks, and the ability to reassign indicators for internal value-creation (Knoepfel, 2001).

Diaz-Balteiro and Romero (2001) discussed the need for natural systems sustainability index. The research study explained how there is some consensus about the approach in characterizing the sustainable index in terms of predetermined indicators. Thus, what is needed is an aggregate index that interprets economic, social, and environmental data in a more comprehensive format. In the same vein, Sands and Podmore (2000) discussed the design and development of (ESI) Environmental Sustainable Index system to measure triple bottom lines of agricultural
organizations. They went on to suggest that, “this research was motivated by the premise that the concept of sustainability must move from a qualitative state to a quantitative form, in order for sustainability to serve as a guide for agricultural development initiatives” (p. 30). Also, little attention has been devoted to find consistencies in measurement, but also defining initiatives, operationally, as a guide in supporting sustainable goals, and sustainable goal pursuits. This is, of course, moving the sustainable paradigm away from the notion that reporting the bottom line is nothing more than public impression management (Mitchell, Curtis, & Davidson, 2008). Below is a theoretical model that shows how to develop sustainable goals from inception. The process outlined in the model gives prescriptive steps in developing goals, creating index indicators, and forecasting approximate impact.

**Triple bottom line measurement model**

The triple bottom line measurement model listed in figure one displays the process in which triple bottom line can be developed and outcomes reported. One thing to note in this model is the two areas: stakeholder and community involvement, and the designated weights assigned for each indicator that has been specifically designed as the measure of goal-attainment. In the theoretical model, it should be noted that the stakeholder community public variable has a continuous loop back to the initial internal sustainability developments (e.g. developing goals, assign index, summation of impact). The importance of the loop is to streamline and maintain communication between those internal to the organization and external stakeholders. Added to this model is the development of weights (e.g. numerical scales, ranges consisting of frequencies) that are agreed upon internally to signify the level of sustainable triple bottom line participation. Weighting can also reflect the amount of resources allocated to such future goals then these weights are assigned to the indicators.

**Figure 1: Proposed TBL measurement outcome model**

![Figure 1: Proposed TBL measurement outcome model](image)

The variables listed in the theoretical model should be tailored specifically to the organization, but starting the process by developing specific and measurable goals are the essential first steps. Strategic goals are well defined while long and short-term objectives are confirmed organizational leaders. The summation of impact refers to the unit of measure that is assigned to each sustainable event, or sustainable initiative. The major difference at this point between other sustainable measurement models and this model are the mediating variables stakeholders and community publics and the designation of weight for indicators. Both the stakeholders and communities are charged with [weighing] prioritizing these initiatives. This model asserts that public and stakeholder support is paramount in advancing sustainability efforts. The categories
are then given a weight with a numerical value, which is then converted to an outcome measure. This process adds to the validity of the outcomes as organizations pursue strategic sustainable decisions. Organizational leaders are able to specify the criterion for an economic, or social activity decision, or social investment in a triple bottom line stratagem. Decision makers can test the strength of the initiative to goal by starting with: is the goal specific enough to start and finish; is this goal something we could measure for results; can we actually take action in pursuing this goal, do we have resources; is this a realistic goal for the organization; is this goal within our strategic framework for the year/quarter. If these questions are answered with, yes, at that time the stakeholders and invested publics give initiatives the weight relative to the importance of the direction of the organizational strategic plan.

Index Indicators. In order to fully integrate triple bottom line measures into the sustainable (TBL) organizational planning (Sherwood, 2007; Bell and Morse, 2003) explained how there are two approaches, “a visual that shows the results in a table or diagram, or a numerical approach, which combines the indicators into a single index” (p. 238). In an index format one is able to view and compare initiatives in relation to regional, local and historical sustainable developments. However, it should be noted that Sherwood (2007) also asserted, “More research is needed in this area in order to develop a fully operational TBL model” (p. 238). Utilizing the index to display criteria on numeric designation enables decision makers to see increases and decreases on goal attainment. The index format should be divided between three different unit measures: financial performance, environmental performance, and social performance indicators. Each element should have a particular indicator with color coded designation. Magee et al. (2013) explained that data validity and logic are vital for data indexing.

Summation of Impact. This section of the proposed model takes into account the potential of desired impact on one of the three triple bottom lines. This is the final stage of the sustainable developmental process. This segment sums up the impact that organizations intend to make. Data from this section are pulled from a historical reference point, or guided by a “new” found initiative. The summation is bundled together with one of the triple bottom lines, and labeled as a particular measure of “anticipated” impact of that initiative. The last step is the determination of the lasting impact this environmental initiative is projected to have in either months, bi-monthly, or even years. However, impact generation, that is, related to triple bottom lines should be divided into two main categories: activities and assumptions. The two main categories [activities and assumptions] are embedded in the summation impact, where the goals are totaled, labeled, and with numerical scaling showing results and the anticipated impact. The figure below gives a description of what goes into the input summation.

Weight indicator. While there is not much guidance in the literature on this particular weighing function, the researcher realized the importance of a customized weighting system determined by the strategic goal of the organization. Mohoney and Potter (2004) agreed with the model by stating that, “Equal weighting is not necessarily given to each dimension” which is the underpinning of the proposed weighted method. That is, a weighing system that is connected to the financial performance, so that stakeholders are able to view initiatives relative to budget resources, and annual performance documentation. The weights are placed on a particular social, environmental, and social development activity (Furnish, Kay & Xia, 2013). The community and internal customers are able to see how much weight is put on the presented sustainable activities and how they are connected, not only to the budget, but also to the grand scheme of the organizational strategic plan. Also, some initiatives are difficult to quantify
numerically, thus this system allows stakeholders and shareholders to weigh the intangibles of perhaps the unobserved sustainable goals.

**Index Method Strengths and Weaknesses**

While the indexing method is an ideal analytical tool to measure and report outcomes for triple bottom line activities. The index format is not without disadvantages related to organizations setting goals, obtaining goals, and the capability of being able to report on those goals. The negative implication of indexing is that to the untrained eye, it could be difficult to read the data. Sridhar (2012) suggested that the benefit of the index is that it can build clear categories of ranking vs non-ranked data points. Sridhar explained that the missing link for future research is to use the indexing method by conducting interviews prior to loading data into the index and translating the data.

**Weight indicator development**

The proposed model shows how to structurally and numerically explain what social, environmental, and economic measures criteria were met in order to provide intended sustainable responsible impact. The use of the mix-method approach as the basis for analyzing and testing the proposed model, is due partly because of the nature of data needed to be collected. The logic behind using mixed methodology is based on the nature of devising and constructing well defined indicators for the triple bottom line – which involves interviews, observing the phenomenon, and analyzing the data. On the other hand, it is imperative that organizational decision makers use quantitative data collection to appropriately label the measurable indicators that reflects the components of performance or impact, and qualitative for internal goal making (Norman & MacDonald, 2003). Below is a table that shows assigned weight and indicator categories. This process should involve key constituents and publics in determining the meaning of and weight of the indicators.

**Table 1: Example of Indicators with public opinioned weights**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definitions</th>
<th>Weight</th>
<th>Impact Judged by Stakeholders</th>
<th>Index color code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unions/Industrial Relations</td>
<td>Percentage of employees represented by independent trade union organizations.</td>
<td>10%</td>
<td>Economic - Medium</td>
<td>Red</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>Percentage of employees who agree their workplace is safe.</td>
<td>60%</td>
<td>Environmental -- High</td>
<td>Blue</td>
</tr>
<tr>
<td>Environmental</td>
<td>Percentage of whether or not employers invest in specific environmental/planet initiatives</td>
<td>15%</td>
<td>Social -- Medium</td>
<td>Green</td>
</tr>
<tr>
<td>Community</td>
<td>Percentage of policies encouraging the use of local contractors.</td>
<td>15%</td>
<td>Economic - - Medium</td>
<td>Orange</td>
</tr>
</tbody>
</table>

**Table 2: Theoretical index with combined weight indicators**
**Table 3: Sustainable comparison between three organizations**

**CONCLUSION**

This prescriptive study purported how the triple bottom line measuring methodology has to align with the established sustainable goals of the organization and has to convey the engagement level for each indicator. The goals of the organization should be developed with impact in mind by providing measurements for each initiative pursuit. Poorly decided impact [TBL] goals are grounds for stakeholders and communities to question the proclaimed overall impact to either the: society, economic, and environmental realm of a community. From this
study, the use of an index platform is ideal as a sustainable commitment comparison tool, which displays the measures decided upon by decision makers and vital input from the community in which the organization exists. All of which is difficult to bundle into a specific unit (e.g. dollars, shares, profits). That is, out of the three relevant choices of methods in measuring the bottom line, I explained how the index, in particular, is the most beneficial, as opposed to the score card and shadow accounting method, because it is suggested that both stakeholders and publics have investment in these goals. It has thus been shown how the combined mixed-method approach in by including both communities and shareholders. Secondly, this paper thrust forward the notion that triple bottom line measures and their impact needs to be comparable with other closely related originsations. This paper has brought to light that organizations are in markets where they are scrutinized by the general population regarding bottom-line action reporting. This paper does not discount other methods of reporting; this paper suggested that by incorporating shareholders and stakeholders into the process assist in the monitoring and execution process. The weights added to (TBL) indicators makes the data readable to the general community citizen and the data is then formatted in an index for esthetic purposes, which makes disseminating the data easier. generating sustainability initiatives with a weighing mechanism driven by stakeholders and community members are best suited for the fundamental structuring and formulating of initiatives with effectively measuring all aspects of the TBL makes for stronger reporting to a broad number of constituents. Organizations should go beyond the balance sheet of reporting profits by focusing on the social, environmental, and economic performance actions; there is a need for other organizational types to become transparent in sustainable performance to goals. Organizational decision makers need to turn sustainable goals and decision data into meaning that the general population can interpret and compare data for future desired sustainable impact, and to enhance organizational accountability. This allows stakeholders to view the actions in a more holistic way and with an organic “ground-up approach” (Bedford, 2012, p. 279). The index has deeper meaning than just a bottom line in numeric value; rather, it displays actionable items used to compare both previous and current data.

The organizational environment needs methods that generate comparative data, action, goals and TBL impact based on multiple sustainable levels because of the increasing demand from external forces. These external forces are related to the organizational profitability and stock price, which is why this triple bottom line measurement paradigm is vastly important for organizational leaders to incorporate into their reporting process. The supporters of these organizations are aware that the current measuring of TBL’s is not analogous with income statements. That is why a need exists to push this topic forward; finding a flexible yet uniform method that allows others to manipulate the data to find a common sum. Providing streamlined benchmarking data driven goal and providing an index to display these sustainable commitment is vital as the triple bottom line measurement paradigm is shifting. This paper does two things worth noting, first, this paper has provided new ways to add the triple bottom line reporting

REFERENCES


