

Introduction

- Business world lacks any sort of comprehensive set, or index, of indicators for sustainability performance that are:
 - Context-based, as recommended by GRI and others
 - Full Triple Bottom Line (TBL) in scope, not just environmental
- A general specification for context-based sustainability metrics was developed several years ago:
 - By Mark W. McElroy, Ph.D. and the Center for Sustainable Innovation
 - For all aspects of the TBL, not just environmental
 - Prominently featured in the Social Footprint Method

<http://www.sustainableinnovation.org/the-social-footprint.html>

Introduction (cont.)

- The general specification for context-based metrics called for:
 - Interpreting the sustainability performance of an organization as a function of its impacts on *vital capitals* in the world that people rely on for well-being
 - An understanding of such vital capitals as consisting of (a) natural capital, and (b) human, social, and constructed capitals, or what we call *anthro* capitals
 - A quotient construct, in which denominators represent normative impacts by organizations on the carrying capacity of vital capitals, and numerators represent actual impacts by organizations on the same things

Introduction (cont.)

- For the past several years, various successful attempts have been made to pilot, test, and evaluate the quotients approach to sustainability metrics:
 - In ways consistent with GRI's call for 'sustainability context' in sustainability measurement and reporting
 - In ways that bring 'context' to sustainability metrics by factoring actual environmental, social, and economic conditions in the world (as they pertain to basic levels of human well-being) into the business of designing and applying such metrics
- No attempt has been made, however (until now), to implement this idea in the form of a full TBL index

It All Starts With a Taxonomy

- In 2008, we published a taxonomy for sustainability metrics that was TBL in scope, and vital-capital-based in its orientation

AOIs*		TBL		
		Environmental	Social	Economic
Natural Capital		√		
A N T H R O C A P I T A L	Human Capital		√	√
	Social Capital		√	√
	Constructed Capital		√	√

Check marks indicate areas where metrics are needed in order to fully reflect organizational impacts on vital capitals for each of the 3 bottom lines.

Some Other Considerations

- To be meaningful, all metrics should be quotient-based with standards of performance indicated in denominators
- The fewer the number of metrics, the better:
 - Easier to implement
 - But should still *indicate* broader performance
- The index should at least be comprehensive in terms of:
 - Its treatment of all three bottom lines
 - Its treatment of all relevant forms of capital for each bottom line

What Does 'Context' Mean?

- In its G3 standard, GRI defines 'sustainability context' in measurement and reporting as follows:
 - "Performance information should be placed in context."
 - "The underlying question of sustainability reporting is how an organization contributes to the improvement or deterioration of economic, environmental, and social conditions at the local, regional, or global level."
 - "Simply reporting on trends in individual performance (or the efficiency of the organization) will fail to respond to this underlying question."
 - "Reporting organizations should therefore seek ways to express their individual performance in relation to broader environmental and social sustainability."

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TBL* TYPE	#	AREAS OF IMPACT	VITAL CAPITAL AFFECTED	FUNCTIONAL DESCRIPTION OF METRIC**	
T R I P L E B O T T O M L I N E	E N V I R O N M E N T A L	1.	<i>Climate</i>	Natural Capital	An indicator that measures organizational greenhouse gas emissions relative to an allocated share of the earth's assimilative capacity to safely absorb them.
		2.	<i>Air</i>	Natural Capital	An indicator that measures organizational impacts on air quality, relative to standards for what such impacts ought to be in order to ensure human well-being.
		3.	<i>Water</i>	Natural Capital	An indicator that measures organizational water use relative to an allocated share of locally available renewable supplies.
		4.	<i>Other Natural Material Resources</i>	Natural Capital	An indicator that measures organizational use of, and/or impacts on, non-water natural material resources, including space, relative to standards for what such usages or impacts ought to be.
		5.	<i>Solid Waste Assimilation</i>	Natural Capital	An indicator that measures organizational emissions of solid wastes relative to an allocated share of the earth's assimilative capacity to safely absorb them (e.g., landfill capacities).
		6.	<i>Ecosystems</i>	Natural Capital	An indicator that measures organizational impacts on ecosystem health and habitats relative to an allocated share of related carrying capacities and/or impacts on non-human well-being.
		7.	<i>Life</i>	Natural Capital	An indicator that measures organizational impacts on flora, fauna, and biodiversity, relative to standards for what such impacts ought to be in order to ensure human and non-human well-being.

*TBL = Triple Bottom Line

**All metrics are grounded in a standard of ensuring human well-being, whether stated explicitly or not.

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TBL* TYPE	#	AREAS OF IMPACT	VITAL CAPITAL AFFECTED	FUNCTIONAL DESCRIPTION OF METRIC**	
T R I P L E B O T T O M L I N E	S O C I A L	8.	<i>Human Health</i>	Human Capital	An indicator that measures organizational impacts on human health, relative to standards for what such impacts ought to be in order to ensure human well-being.
		9.	<i>Social Institutions</i>	Social Capital	An indicator that measures organizational contributions to creating and/or maintaining social institutions required for human well-being, relative to standards for what such contributions ought to be.
		10.	<i>Social Infrastructure/ Material Goods</i>	Constructed Capital	An indicator that measures organizational contributions to creating and/or maintaining social infrastructure and/or material goods required for human well-being, relative to standards for what such contributions ought to be.
		11.	<i>Climate Change Mitigation</i>	Human, Social and Constructed Capital	An indicator that measures organizational contributions to restoring greenhouse gas concentrations in the earth's atmosphere to safe and stable levels, relative to standards for what such contributions ought to be.
	E C O N O M I C	12.	<i>Livable Wages</i>	Human Capital	An indicator that measures the extent to which an organization pays its workers a livable wage, relative to local standards
		13.	<i>Business Ethics</i>	Human Capital	An indicator that measures the extent to which an organization treats its employees ethically, relative to ethical norms.
		14.	<i>Economic Institutions</i>	Social Capital	An indicator that measures organizational contributions to creating and/or maintaining economic institutions required for human (economic) well-being, relative to standards for what such contributions ought to be.

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TBL* TYPE		#	AREAS OF IMPACT	VITAL CAPITAL AFFECTED	FUNCTIONAL DESCRIPTION OF METRIC**
T R I P L E	E C O N O M I C	15.	<i>Economic Infrastructure/ Material Goods</i>	Constructed Capital	An indicator that measures organizational contributions to creating and/or maintaining economic infrastructure and/or material goods required for human well-being, relative to standards for what such contributions ought to be.
B O T T O M					
L I N E					

*TBL = Triple Bottom Line

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Some General Comments

- All of the proposed metrics are context-based, in line with GRI's recommendations
- In practice, some metrics are more rigid than others:
 - Environmental metrics, for example, might be more consistently applied from one organization to another
 - Some of the social and economic metrics, by contrast, might be more tailored to individual organizations, while still being of the same general type and targeted at the same issues
- Several of the proposed metrics have already been developed in prototypical form, either by us or by others – the rest are still in development

Some Specific Comments

- Environmental Bottom Line Metrics
 - Intended to cover all major areas of environmental impact
 - Assume human well-being is tied to ecological well-being
- Social Bottom Line Metrics
 - Address organizational impacts on people and society
 - Measure impacts on all three types of anthro capital
 - Tied to impacts on general human well-being
- Economic Bottom Line Metrics
 - *Not* the same as metrics for financial performance
 - Focus, instead, on impacts on the broader economy
 - Tied to impacts on human *economic* well-being

Scoring Considerations

- Scoring criteria, method, and performance scales already exist for metrics of this kind
- Each metric produces its own standalone score
 - To be fully sustainable, an organization should score sustainably on each and every metric
 - Blended scores are not advised, since positive scores can cancel out negative scores
 - Overall scores should be expressed in terms of positive versus negative scores on all 15 metrics – a perfect score would be 15 positive scores out of 15 possible scores
- Unlike other indexes, impossible to score positively with this scheme while having unsustainable impacts

Summary and Next Steps

- This is arguably the world's first context-based sustainability index for use at an organizational level
- Should be seen as a strawman index, to be modified, tailored, refined, etc. as necessary
- Parties interested in helping to move this concept forward should contact us at the following coordinates:

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