



The Social Footprint

Introduction and Proof of Concept

A Sustainability Innovation by the

Center for Sustainable Organizations

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“A sustainable society would not freeze into permanence the current inequitable patterns of distribution. It would certainly not permit the persistence of poverty. To do so would not be sustainable for two reasons. First, the poor would not and should not stand for it. Second, keeping any part of the population in poverty would not, except under dire coercive measures, allow the population to stabilize.”

Meadows, Meadows, and Randers
Beyond the Limits, 1992

*The Social Footprint is dedicated to
the memory of Donella (Dana) Meadows*

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1. Introducing the Social Footprint



What Is the Social Footprint?

- ▶ A measurement and reporting method that organizations can use to measure, manage and report their social sustainability performance
- ▶ A product of a new school of sustainability theory and practice:
 - An application of *context-based sustainability* developed by Mark W. McElroy, Ph.D. and the Center for Sustainable Organizations
 - Measures organizational impacts on the quality and sufficiency of vital *anthro capital*¹ (human, social and constructed capital)
 - Comprises the missing link in tools required to fully operationalize the triple bottom line
- ▶ Measures and reports organizational impacts on anthro capital relative to standards or norms for what such impacts need to be in order to be sustainable
- ▶ An implementation of what GRI calls ‘sustainability context’

1. See next slide for discussion of this term.

What Is The Footprint's Philosophy?

1. Conceptually committed to a quantitative and context-based *quotients approach* to sustainability: performance measured relative to *standards* of performance
2. Activity-based: Sustainability is measured in terms of impacts that arise from *organizational operations* – i.e., their actions
3. Grounded in the principle of personal and collective responsibility, according to which people are responsible for their mutual or collective actions, including those of their organizations whose actions they directly support and jointly perform
4. Conceptually committed to *anthro capital*¹ as the social *thing* that organizations can have impact on, the effects of which determine whether or not their activities or operations are socially sustainable
5. Practical: Confines measurement and reporting to organizational boundaries, just as financial reports do

1. We use the term 'anthro capital' to refer to the combination of *human, social* and *constructed* capital. These capitals are vital to human well-being.

2. The *Quotients Approach* to Sustainability



What is the Quotients Approach?

- ▶ The result of a lesson taken from environmental sustainability tools: *That the sustainability of human activity is a function of its impacts on the quality and/or sufficiency of natural capital as such capital is required to ensure human well-being*
- ▶ If we generalize that principle, we can say that behaviors of all kinds can be measured on a scale of sustainability, according to their impacts on *capitals* of one kind or another – i.e., *sustainability entails the maintenance and/or production of vital capitals as required to ensure human (and non-human) well-being*
- ▶ Thus, in the case of the Social Footprint, we look at human behaviors and we evaluate their impacts on *human, social and constructed* capitals (or what we call “anthro capital”) – *anthro*, because unlike natural capital, the others are anthropogenic

The Quotients Approach (cont.)

- To assess sustainability performance, then, we must compare impacts on vital capitals to standards or norms for what such impacts ought to be in order to be sustainable
 - We ask: *Is the behavior sustainable relative to the impact it is having on the stock and function of vital capitals?*
 - And because we are comparing one thing to another — say, X with Y — we can express the comparison in the form of a quotient: X over Y
- This is what gives us our “quotients” approach — For example...
 - A geographical region produces 10 million gallons of freshwater per year, an ecological limit (call that the *denominator*)
 - Sustainability norms suggest that such limits not be exceeded
 - Still, humans in the region use 15 million gallons per year (call that the *numerator*)
 - $15/10 = 1.50$ → Anything greater than 1.0 is unsustainable

The Quotients Approach (cont.)

- Turning to the social arena, the same idea can be applied, with two important differences:
 - We're dealing with impacts on anthro capital, not natural capital
 - Anthro capital (human, social and constructed), unlike natural capital, is created by people and can be produced virtually at will — we can almost always create more of it in order to meet our needs
- Thus, the applicable norms in the case of anthro capital are not a function of what we are stuck with and what we use; rather, they are a function of what we need and what we have decided to produce, or not produce, in response
- For social bottom lines (or quotients), then, the rule of thumb reverses: any score of less than 1.0 is unsustainable¹

¹ Ecological proxies can also be used in Societal Quotients, where ecological performance indicates social performance, as in the case of our Global Warming Footprint, which measures performance against ecological goals as defined by social plans of action. In those cases, the scoring of social footprints follows the logic of the Ecological Quotient (≤ 1 is sustainable, etc.), thanks to the inverse relationship between the proxy and the thing it stands for.

The Quotients Approach (cont.)

- A quick example:
 - A certain community has a need for \$10,000,000 a year in order to provide primary education for its children (call that the *denominator*)
 - Residents in the community are only providing \$8,000,000 a year in funding for primary education (call that the *numerator*)
 - \$8 mil./\$10 mil. = .8 → Anything *less* than 1.0 is unsustainable
- What makes it unsustainable is that we have defined a necessary stock of anthro capital in the area of interest to us (e.g., a norm for education) – shortfalls in *contributing to or maintaining* that stock can lead to undesirable, if not dangerous, social outcomes
- Now imagine that we are able to quantify minimum levels of sufficiency for any form of anthro capital....when we do, the makings of a *Social Footprint Method* come rushing into view

The Quotients Approach (cont.)

- Denominators:
 - Relate to preserving and/or producing or maintaining the carrying capacity of vital capitals at levels required to ensure human well-being
 - Are calibrated to individual organizations, either as a function of their size or some other factor (e.g., in accordance with their economic contributions)
 - Are normative (“N”) in content, and constitute standards of performance
- Numerators:
 - Relate to impacts on the same carrying capacity of the same vital capitals referred to by denominators
 - Are also calibrated to the same individual organizations
 - Are actual (“A”) in content, and constitute descriptions of actual performance
- Sustainability Quotients:
 - Sustainability Performance = A/N
 - See next slide....

The Quotients Approach (cont.)

A General Specification for context-Based Sustainability Metrics

$$\text{Sustainability Performance}^* = \frac{\text{A measure of impact on a vital capital}}{\text{A standard or norm for what the impact on the same vital capital ought to be in order to ensure stakeholder well-being (i.e., for the impact to be sustainable)}}$$

***Where:**

- For impacts on *natural* capital, quotient scores of ≤ 1.0 = sustainable, > 1.0 = unsustainable
- For impacts on *human, social* or *constructed* capital, quotient scores of ≥ 1.0 are sustainable, < 1.0 are unsustainable

Quotients as Measures of Sustainability Performance

<p>Ecological Bottom Lines¹</p>	$\frac{\text{Actual Impacts on Natural Capital}}{\text{Normative Impacts on Natural Capital}} = \text{Ecological Quotient (EQ)}$	<p>- EQ ≤ 1 is sustainable - EQ > 1 is <i>unsustainable</i></p>
<p>Social Bottom Lines¹</p>	$\frac{\text{Actual Impacts on Anthro Capital}^2}{\text{Normative Impacts on Anthro Capital}^2} = \text{Societal Quotient (SQ), or what we call } \textit{The Social Footprint}$	<p>- SQ ≥ 1 is sustainable³ - SQ < 1 is <i>unsustainable</i>³</p>
<p>Organizational Sustainability Defined</p>	<p>Ecological Quotients (EQ) are ≤ 1 AND Societal Quotients (SQ) are $\geq 1$³</p>	<p>- If true, then sustainable - If untrue, then <i>unsustainable</i></p>

¹ We take the position that there are many ecological bottom lines and many social bottom lines, each corresponding to impacts on some aspect of natural and/or anthro capitals, respectively. So-called economic bottom lines are merely types of social bottom lines, and the financial bottom line has nothing to do with any of this.

² We use the term 'anthro capital' to refer to the combination of *social capital*, *human capital*, and *constructed capital*. These capitals are vital to human well-being.

³ Ecological proxies can also be used in Societal Quotients, where ecological performance indicates or stands for social performance, as in the case of our Global Warming Footprint, which measures performance against climate change mitigation plans, treaties or scenarios. In those cases, the scoring of social footprints follows the logic of Ecological Quotients (≤ 1 is sustainable, etc.), thanks to the inverse relationship between the proxy and the thing it stands for.

Social vs. Ecological Footprints

The Social Footprint and the Ecological Footprint are alike in the sense that both are about measuring gaps, but the similarity ends there. In the case of the Ecological Footprint, the gaps of interest to us are between resources we need and resources we are stuck with; in the case of the Social Footprint, the gaps of interest to us are between resources we need and resources we have decided to produce.

Ecological resources are fixed and limited, social resources are not – we produce them as we see fit.

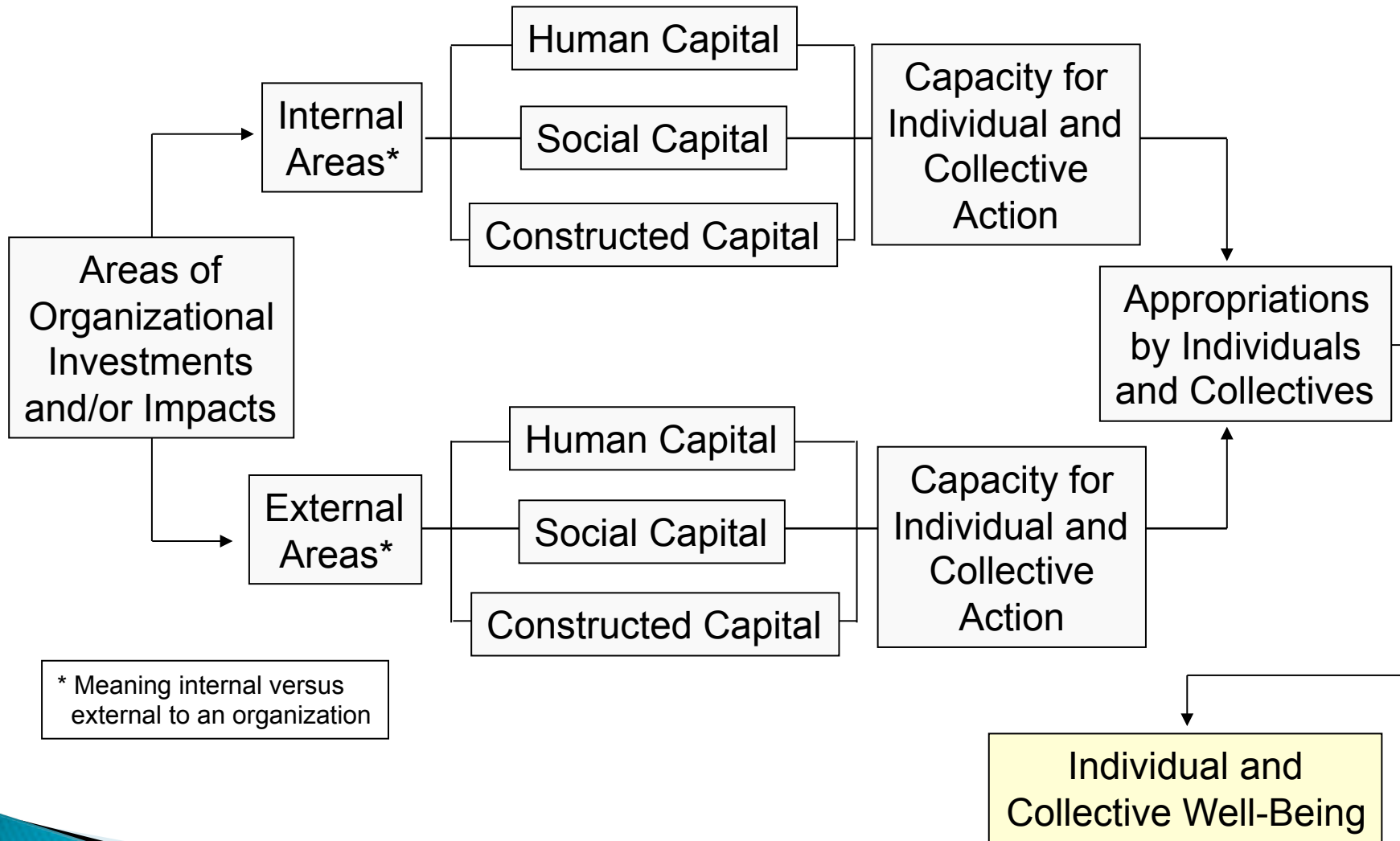
3. *Anthro Capital* as the “Thing” We Look At



Non-Financial ‘Anthro Capital’

- ▶ In contemplating a Social Footprint (and its quotients), we need to address the things that our activities have impact on, and the things that investments in improving a social bottom line are aimed at — for us, it’s ‘*anthro capital*’ of three different kinds:
 1. Human Capital, consisting of personal health, knowledge, skills, experience, and other resources (including human rights and ethical entitlements) held and relied upon by individuals in order to take effective action and ensure their own well-being
 2. Social Capital, consisting of social networks and mutually-held knowledge held and relied upon by collectives in order to take effective action and ensure their own well-being
 3. Constructed Capital, consisting of material things, such as tools, technologies, roads, utilities, infrastructures, etc., that people produce and use in order to take effective action and ensure their own well-being

Social Footprint Reference Model



- Thanks! -

For more information, contact:

Mark W. McElroy, Ph.D. at mmcelroy@vermontel.net

www.sustainableorganizations.org