

## Better Metrics The True Value Impact Accounting Initiative April 2017

By way of brief background, I read engineering and economics at at Cambridge and graduated in 1961. My first job after graduation was in heavy engineering working for Davy United that made steel mill equipment (rolling mills) for different countries all over the world (but not the USA and Japan!). I realized very quickly that big decisions were being made by top executives with accounting backgrounds and a year later I started articles with Cooper Brothers in London (subsequently Coopers and Lybrand subsequently PriceWaterhouseCoopers) and qualified as a Chartered Accountant in 1965. In 1966, I migrated to Canada and later to the USA and started a period of corporate work helping companies maximize profits from their operations. This was fascinating work and I was quite good at improving profit performance because I understood product and production a lot more than most accountants! From 1970 to 1974 I did profit improvement work with Gulton Industries, a company with a diverse portfolio of technical products, and then from 1974 to 1978 I was the CFO of Continental Seafoods based in the USA but involved with shrimp fisheries all over the world ... more than 26 different jurisdictions. Among other things, this gave me an opportunity to start to see the economic and social conditions of all sorts of different places.

Since 1978 I have worked independently as a consultant and for many years I did consulting assignments with the World Bank, the United Nations, international companies and many other organizations. The financial accounting that works very well for the for profit business organization is inadequate for works that are aiming for socio-economic development or the amelioration of humanitarian disasters. There is no accounting that reflects the value destruction that is dead people resulting from failed development and societal dysfunction? I started to ask this question while I was still working for Continental Seafoods in 1975 when I first encountered dead children in the middle of Lagos Nigeria! Later I worked on drought emergencies, post war reconstruction, sector and national level development planning, and ... and ... and ...

I don't travel the way I used to ... but I am still trying to figure out how to do accounting in a more complete way ... and True Value Impact Accounting (TVIA) is the latest iteration of my thinking on this matter.

The foundation for TVIA is part engineering (specifically engineering thermodynamics) and part double entry bookkeeping. Both of these disciplines have the idea that when an initial state is operated on by some sort of process, there is a new state that emerges. This has been refined over the years to improve the financial reporting for corporate organizations, and is supported by all sorts of complementary management and operational data systems ... all aimed at making more profit and creating wealth for investors. In the process, while financial reporting has become more sophisticated, the measurement of impact on people / society and on the planet / environment has been essentially ignored.

I am trying to expand the concepts that are the norms for double entry financial accounting so that they work for the accounting for everything. The idea of financial capital is really nothing more than the STATE of money measures at a moment in time. In some cases the accounting for financial capital is

done using different currencies and there are basic conventions that are used to handle the various exchange rates involved. With TVIA we expand this idea so that we can have multiple UNITS OF ACCOUNT for the many CAPITALS that reflect the complete socio-enviro-economic system.

For many years now the idea has been in play that business performance should not only be about profit, but also about people and planet (The Triple Bottom Line / John Elkington / 1994) and over time, many initiatives to improve reporting have emerged. The two with the most traction are GRI (Global Reporting Initiative) and IR (Integrated Reporting from the International Integrated Reporting Council (IIRC). In the US there is also SASB (Sustainability Accounting Reporting Standard) and there are others. They all have one thing in common ... they do not use accounting style numbering but a variety of questionnaires that make summary reporting next to impossible. Another thing they have in common is that they appreciate the importance of externalities in reporting business performance and the importance of ALL the capitals, rather than just the financial capital.

TVIA also embraces the idea that it is not only the impact on the business organization that matters, but impact on everything. Over the past few years there has been considerable discussion about how many capitals there are ... whether it is 3 or is it 8. My essay in December 2014 settled on 7 and created a certain amount of dissent! In reality it does not matter how the capitals are segmented as long as ALL the capital is included. But what is capital anyway? It is in fact a concept equivalent to STATE which is what the BALANCE SHEET in conventional accounting documents.

Many practitioners of impact analysis have settled on a 6 capital segmentation ... and TVIA is conforming to this segmentation. These capitals are:

- ... Human Capital
- ... Social and Relationship Capital
- ... Natural Capital
- ... Created Physical Capital
- ... Created Intangible Capital
- ... Created Financial Capital

For simplicity I often refer to a 3 capital segmentation as follows:

- ... People / Human Capital
- ... People Built Capital
- ... Natural Capital

An important characteristic of TVIA is that it is based on the foundational concept of double entry accounting where ALL the accounts are in balance and there is an unbreakable connection between changes in the BALANCE SHEET and the results in the PROFIT AND LOSS ACCOUNT. This is an important idea because what it means is that the PROGRESS of the CAPITALS can be understood simply by knowing about the CHANGES IN THE BALANCE SHEET.

Conventional financial accounting has been adapted to facilitate the management of the business organization in many ways. Cost accounting in its various forms makes it possible to understand what decisions need to be made to improve profit performance ... and in turn stock prices and investor wealth. There is nothing of equal power and standing about the impact on externalities and in consequence, these are routinely ignored in high level decision making even though there are a growing number of individual senior executives and a growing number of important investors who want to know about impact.

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The emergence of GSE (Governance, Social and Environmental) and PRI (UN Principles of Responsible Investing) touch on all of this in important ways ... but these initiatives simply aim to demonstrate that an investor gets a higher financial return when GSE measures and PRI measures are good. This contrasts with TVIA which includes this idea but also enables investment in positive outcomes for People and Planet while having a negative financial return. This is very important because much of what the world needs to do has huge social and environmental value while being unable to earn a conventional financial return.

TVIA uses many of the concepts that are already familiar to accountancy in its conventional form.

TVIA wants to avoid monetization as a way to measure everything. The main reason for this is that the money itself is deeply flawed as a measure. Markets and supply and demand can produce a money number result, but it is unlikely to be a number that has much relationship with the VALUE of the item. Instead TVIA uses multiple UNITS OF ACCOUNT that are similar to different currencies in conventional money accounting. Everything in the capitals has multiple units of account just as there would be in the accounts of an organization that is working in multiple currencies. Conventional accounting has conventions for reporting in these situations that involve exchange rates between currencies and the same applies with multiple units of account. What these exchange rates will be is going to depend on many things including such issues as demographics where younger people have an increasing interest in the environment relative to older people, for example.

Another concept from conventional accounting that is used in TVIA is the idea of a REPORTING ENTITY and the REPORTING ENVELOPE. Almost all financial reporting is based on a corporate organization being the REPORTING ENTITY and it is true that a huge amount of the economic product flows through corporate organizations and is reported in the conventional financial accounts. Reporting of the performance of a corporate organization using financial accounting which ignores impact is essentially incorrect ... and significantly so. Improving the reporting for business organizations using a TVIA like methodology is a priority, but it is only a part of what is needed.

There needs to be TVIA style accounting and reporting for all the other entities that make up the socio-enviro-economic system. These REPORTING ENTITIES include:

- ... Organizations (see above)
- ... Places
- ... Products
- ... Processes
- ... Streams / Strands / Strings
- ... People as individuals
- ... People in family units / extended family / community / society

PLACES are incredibly important ... whether it is a city or a rural community or an uninhabited place. Many of the rules of CONSOLIDATION that apply in conventional financial accounting consolidations can be applied to the consolidation of all the activities and stuff that goes on in a place. Care should be taken to understand that the Government of a Place is an ORGANIZATION while, for example, the United States as a country is a PLACE. The Government of a Country may be bankrupt but the Country as a PLACE can still be quite wonderful ... but everything ... ALL the CAPITALS ... must be included.

PRODUCTS are also very important, but in a different way. Standard of living and quality of life for PEOPLE depend on the availability of PRODUCT for use and consumption, and these PRODUCTS

flow through the socio-enviro-economic system through PROCESSES, ORGANIZATIONS, PLACES and on the way do GOOD and do BAD. In a well managed world where good decisions are the norm, PEOPLE should be able to make decisions about what PRODUCTS are GOOD and what PRODUCTS are BAD.

The same goes for PROCESSES which are usually selected by ORGANIZATIONS ... with the GOOD and the BAD flowing into the performance of the ORGANIZATION as well as into the PRODUCTS being produced and eventually consumed by users.

STREAMS, STRANDS, STRINGS are REPORTING ENTITIES that reflect the reality of the complex global system that now exists with activities at any one point rippling through all of the system.

But in the end, everything is about PEOPLE. The purpose of everything is really to enable me, my family my society my world to be a better place ... not only now but into the future. In the end it is PEOPLE who are going to make the decisions that are going to make the world a better place. Companies (ORGANIZATIONS) will make decisions that are driven by consumer (PEOPLE) choices. More than anything else, PLACES are as good as the PEOPLE in them. An in the end, companies and governments (ORGANIZATIONS) are run by people ... and investors are PEOPLE.

TVIA aims to make it possible for PEOPLE to make better decisions because they have easy simple access to better information for decision making. There is rudimentary information about COST, PRICE and VALUE for products being bought and on the shelves of the supermarket. TVIA wants to see a UNIVERSAL STANDARD VALUE PROFILE for all the PRODUCTS that flow through the socio-enviro-economic system ... a database system that is now feasible as a result of modern technology ... the Internet, cloud, blockchain and massive datasets. This idea about STANDARD VALUE is not very different from the idea of STANDARD COSTING that simplifies decision making in the corporate organization.

The website http://truevaluemetrics.org explains all of this ... not very well ... and also tells something of the journey I have had in developing these ideas. I credit my engineering training at Cambridge with the foundational thinking ... specifically engineering thermodynamics. I was never impressed with economics as it presented itself in the books and lectures I attended at Cambridge, but I did have a wonderful tutor (Andy Roy) who made up for the shortcomings and impressed me with the value of fact --> data --> analysis --> conclusion in that direction and not the other way round! I was really surprised when I realized that double entry accounting had so much in common with the simple equations of engineering thermodynamics.

A thriving democracy needs a responsible and effective press ... and for this there needs to be a much improved foundation of progress and performance data ...

Sorry this is so long ... but you did ask!

Peter

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