

# MULTI DIMENSION IMPACT ACCOUNTING (MDIA)

# The TrueValueMetrics Book Section VI

#### **TrueValueMetrics**

ACTION INFORMATION FOR ALL OF SOCIETY

Metrics about the State, Progress and Performance of the Economy and Society

Metrics about Impact on People, Place, Planet and Profit

#### **Background**

The conventional wisdom in some circles is that the purpose of business is to make profit, and if a business makes profit, then there will be an optimization of the economy and the maximum of benefit for society. This is the basic premise of the Adam Smith argument for a laissez faire market economy, and it has worked better for most of the last three hundred years than the alternatives.

The modern version of this argument is that business has to optimize its performance relative to the interest of the owners ... the stockholders. Some executives have argued that to do anything else is a breach of trust and executives could be held accountable in law for their actions.

This idea has been challenged. Whether or not the law requires optimization of business for the benefit of stockholders, there are initiatives to make it clear that the 'purpose' of the business is to make a contribution to society using the resources of the business. One such initiative in the United States is the B Corp movement, which specifically has articles in the Bye Laws to ensure that social benefit is a legitimate goal of the business.

Whether or not there is a problem in law to do things that are valuable for society ... for people and planet ... the metrics of state, progress and performance may be structured so that it is possible to see what is going on and understand the implications.

#### TO DO ... Complete this paper

This paper will be complete when it describes the data and the framework with enough clarity to make it possible for systems architects to use it to design the data flow and analysis processes.

# Chapter 3 THERE ARE WAYS FORWARD 3-1 MANY WAYS FORWARDS

This chapter shows there are ways forward. The proposition is that there are new ways to think of development in terms of the four components: people, resources, process and information. The theme of the chapter is to think of people as being both the beneficiary and the driver of development, to think of resources as being abundant but needing mobilization, to think of process as a way to achieve economic value adding and information as a way to improve development performance, to measure performance and provide a new level of accountability in development.

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3-2 AMAZING SCIENCE FOR ENGINEERING
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3-12 WHAT WILL BE THE IMPACT

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3-19 BETTER WAY FUND FLOWS

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#### Chapter 4 - MORE MEANINGFUL METRICS

This chapter is about metrics, and how the way the game is scored will change the way the game is played ... in this case, the game is life itself. Nothing could be more important.

4-1 MEASURE WHAT MATTERS

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4-2 DATA, DECISIONS AND FEEDBACK LOOP

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4-3 FEEDBACK FOR CONTINUOUS IMPROVEMENT

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4-4 COMPREHENSIVE FRAMEWORK

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4-5 REPORTING

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- See more at: http://www.truevaluemetrics.org/DBadmin/DBtxt001.php?

vv1=txt20090003#sthash.fGTc5nrD.dpuf

## Chapter 5 THE KEY CONCEPTS OF ACCOUNTING

#### 5-1 THE DOUBLE ENTRY PRINCIPLE

This chapter shows

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### Chapter 5 - ACCOUNTING'S KEY CONCEPTS 5-1 THE DOUBLE ENTRY PRINCIPLE

#### Double entry ... the central principle of accounting

It would seem that accounting is very old ... there has always been a need for fairness in socioeconomic affairs, and equitable transactions must always have had a role in human interaction. Keeping track has a long history ... and hiding wealth and covering ones tracks has an equally long history.

While some of the old fashioned principles of accounting may no longer be the focus of modern accounting and accounting education, the central core of accountancy, that of 'double entry' is alive and well and very powerful.

#### **Double entry**

Double entry is at the center of accountancy. It is a powerful idea, now almost 500 years old ... and maybe somewhat diminished in its importance with the use of computerized accountancy over the past 40 years. However, it still has an important role to play in accounting excellence that can also be applied in the area of TVM Value Accountancy.

There are two sorts of accounts that together balance ...

- •(A) Balance Sheet Accounts; and,
- •(B) Income and Expenditure Accounts.

In the money profit setting, changes in the balance sheet accounts over a period is a measure of profit. The difference

between total income and total expenditure over the same period is also a measure of profit.

In corporate accounting the accounting is about the activities of the organization. In TVM Value Accountancy the accounting is for the impact of all economic activity on people, place and planet as well as on the profit for an organization.

#### **Balancing the books**

The concept of "balancing the books" has deep significance for the control of economic resources. It is a whole lot more than the accountancy done as a step towards filing a tax return or satisfying a legal requirement imposed by some regulatory agency. Balancing the books helps to identify problems in the activities of an economic entity through the simple process of equating what has been used with what has been achieved ... and if this is not right, something needs to be addressed.

From very early in my career I have used the balance sheet as a benchmark for everything to do with the accounts. If the balance sheet is changing in ways that cannot be explained by the economic activities that are going on, then something is amiss. This is a very simple tool ... but very powerful. It disturbs me that many critical organizations in our modern society including governments and some major financial institutions like Central Banks seem to play fast and loose with the double entry idea and operate on what is essentially a single entry accounting system.

#### **Analytical neutrality**

A critical strength of accountancy is that it produces analysis that is neutral and objective. The use of accounting data may prove a point or support an opinion ... but the data and results are neutral. This is a fundamental of good professional accounting and is key to the system being of value. Old fashioned corporate accountancy had rules of conduct, both professional and internal to ensure that data were neutral and correct. Now TVM Value Accountancy must do the same.

In good accountancy the analysis is neutral ... it reflect a reality. Analysis may reflect a variety of perspectives, and one perspective may differ from another, but they should all be computed using an analysis neutral methodology. Taken together, a variety of different analysis results make a picture. But the process has to be neutral, and reflect as much as possible what is reality. This is in stark contrast to the aggressive use of financial engineering to create the appearance of value merely by representing the reality.

You can fool some of the people some of the time ... but not everyone all of the time.

Old fashioned accountancy based on certain key principles helped to keep financial reports reliable and understandable ... but legislation and rules have sometimes worked to make wrong accounting legal and allowable. These situations have usual had the support of powerful interests ... but this does not make the accounting right ... just legal!

#### **Financial statements**

Financial statements are amazing. In large part because of the double entry construct, in a few short pages, financial statements are able to convey a huge amount of information about the financial status and performance of the reporting entity. Many millions of transactions are condensed into a few summary totals that are (relatively) easy to understand.

Financial statements comprise balance sheet and operating statement that together tell the story of the financial state of the entity and the operating performance of the entity. Most entities will also report in a cash flow format, and there are various requirements and reasons for having notes and explanations as well.

The balance sheet is one of the most powerful analysis tools in accountancy ... critical for financial analysis, especially in complex situations. A balance sheet is accountancy shorthand to describe the financial conditions of an operational entity. It shows assets

and liabilities and explains how the difference between hem came about. A balance sheet is an efficient way of showing with very few numbers the impact of thousands or millions of individual financial or economic transactions. Comparing the balance sheet from different dates makes it possible to measure progress very tangibly and very easily.

An operating statement helps to show how an operational entity is functioning. It shows what revenues or income there has been and what expenditures there have been, and the results of this. The operating statement is prepared using widely understood catagories of revenue and expense so that they are easy to understand and useful for comparative analysis.

Inside a large operating organization there will be many subsidiary operating statements that will facilitate analysis inside the organization. In accountancy there are rules about how this subsidiary analysis is done which may collectively be referred to as rules of consolidation.

#### **Double entry and incomplete records**

The logic of double entry and the framework comprising balance sheet accounts and profit and loss accounts that describe status, change in status and the cost and value or revenue of activities makes it possible to draw conclusions about missing elements. If the elements of the balance sheet are known for a period in the past and the current time, then it is possible to deduce the profit or progress made during this time.

While it is better to have a complete set of data for analysis, important conclusions can be drawn from only a subset of all the data. Because of the balancing principle it is possible to prepare a complete presentation of financial performance without having all the data. It is also possible to validate the coherence of the data.

In practice this means that TVM Value Accountancy can build a useful picture of community progress without having all the details of all the economic activities in the community.

#### Accounting ... the idea of accounts

The origin of an account probably goes back to the idea that a responsible person had to give an account ... an accounting for what had happened. In practical terms an account in accounting is a critical part of the way accounting gets data organized.

#### **Account codes**

Account codes identify accounts ... just as account names identify accounts. Codes can make it easier to process transaction data automatically, as long as the account code designers have some understanding of computer logic and sorting.

#### **Depreciation**

Depreciation brings together both an economic reality and an accounting principle. Some things last for a long time, some last for less time. The time they last and can function economically is the economic life of the thing. The cost when the thing is new is the acquisition cost, but the cost or using this thing in any period is the acquisition cost divided by its economic life.

A basic principle of accounting is that revenues for a period are matched against the costs of generating those revenues in the period.

#### The purpose of accountancy

The purpose of accountancy is to use data that costs as little as possible to create value that is the biggest possible. This is what has been central to accountancy for a very long time and has served the (limited) objectives of profit maximizing business and capital markets very well.

TVM Value Accountancy has the same central idea, except that the goal is to create the maximum of social value ... four dimensions: people, place, planet and profit. Accountancy collects and organizes data in a systemic way ... data that are neutral and representative of reality. TVM Value Accountancy aims to do something similar.

#### Accountancy ... a system

Money profit accountancy is a system, and TVM Value Accountancy is a variant of this system. Both based on the same basic principles for record keeping and accounts that have been used for several centuries. Accountancy has universality, but we have become accustomed to seeing accountancy being used only in an organizational setting, whether it is a company, or in government or an NGO ... and in recent years accountancy has been used creatively without respect for basic principles.

But the powerful logic of accountancy applies wherever there are economic transactions and it is logical to apply the principles of accountancy to the Community and the public in much the same way that the system applies to an organization and its stakeholders.

#### **Audit**

In old fashioned accountancy ... the audit opinion, the statutory audit opinion, was simply that the financial report was a true and fair view of the entity and that the report reflected the underlying vouchers and records. It was nothing more than this.

#### **Data reliability**

The data associated with accountancy are boring ... but the system does what it can to ensure that the data are reliable and may be trusted. The techniques used for this include organization so that there is both internal control and internal check. The quality of accountancy data are enhanced by the professionalism of accountants who address the details that is so essential to data reliability. The data reliability of accountancy is very much greater than what may be achieved using statistical method on top of small surveys. While there is a case for the statistical approach in some limited circumstances, it is not a useful alternative for financial control and for most accountancy reporting purposes.

#### Data independence ... accounting independence

There is a need to have data ... and accounting ... independent. This helps to ensure that the data and the accounting reports reflect reality and are not merely some fiction desired by

operating management. There are many different approaches that can be taken to have this independence ... it is, however, usually not enough to have an independent audit to provide this independent view when the structure itself is deeply flawed.

#### **Modularity**

Modularity helps make something manageable ... and makes it useful more rapidly. This is applied in TVM Value Accountancy to make little things useful while waiting for other detail. In the TVM Value Accountancy framework the community data can be worked on section by section ... bits of the economic activity analysis can be done. Modularity helps make something manageable ... and makes it useful more rapidly. This can be applied in TVM Value Accountancy to make little things useful while waiting for everything to be deployed.

#### **Efficiency**

Efficiency comes more from engineering than from accountancy ... but the idea is very relevant. Productivity is something similar to efficiency, as is cost effectiveness. In each case the amount of output is being related to the amount of input that went into the activity and its result.

#### **Cost of TVM Value Accountancy**

The cost of TVM value accountancy must be small relative to the economic activities that are going on. Because TVM value accountancy aims to be useful in low income communities, the cost of the system is designed to be very very low ... and using only ultra low cost technology and systems. A good accounting system does not come free, but it should not be excessively expensive. Good design especially of analytical codes helps to reduce cost without sacrificing analytical power. A TVM Value Accountancy system can be deployed with very low costs making use of existing available infrastructure. Good design, together with effective use of the Internet and relational database systems makes TVM Value Accountancy much lower in cost than its value.

#### **Transactions**

Transactions are the elemental economic event ... any economic activity comprises many transactions. Every purchase or sale is a transaction. Production is a transaction. Consumption is a transaction. Movement is a transaction. Everything.

TVM Value Accountancy provides a framework so that small amounts of data can be used to build up a complete picture of the impact that economic activities are having on the community and how much resources are being used to give what result ... whether value adding or value destroying.

#### Voucher

A voucher is a document or record of some sort that describes the transaction. It may be a document that describes the sale ... an invoice ... or it might be a set of papers prepared to evidence the approval of the transaction.

#### **Journals ... Books of Original Entry**

Journals the the books of original entry are the first step in traditional accountancy for getting the details of the transaction organized and on the record. Journals ... or day books ... are essentially lists of transactions ... with ALL transactions being put on the record.

#### **IMPACTS**

#### Making value chains benefit community

The end to end value chains tell interesting stories ... and maybe for this reason are not easy to compile. The value chain works well when everyone is making money, and it matters less in this situation that some party is making a lot of money, while others are making only modest amount.

Things work when everyone is in positive money making territory.

In a situation where one main party is making most of the money ... it is likely that this is reflected in the capital markets as a high valuation of the company's stock ... but this is dangerous.

When attempts are made to make the allocation of money and value fairer with respect to the community, the money making by

the one main party gets reduced ... and this in turn reduces the valuation on the capital markets.

Getting equitable distribution of value adding between corporate enterprise and society is not going to be easy ... and there may be major disruption of capital markets as this adjustment proceeds. In corporate accountancy and capital market terms this will be a bad change ... but looked at through the TVM Value Accountancy perspective and including community values it is likely that society will be far ahead.

#### Making data valuable

There is a wide recognition that knowledge confers power and therefore has value. There are many organizations that have data ... and knowledge ... but these are little used for social benefit, rather, they are used to give the organization some competitive advantage. Community Accountancy aims to make data useful as management information for development ... in a complete comprehensive framework. This is the missing element that is needed to bring the north and the south together for global benefit.

- Getting data ...
- •Getting data organized and into a data store where it can easily be accessed ...
- •Mobilizing resource so tat they are allocated effectively ... the north has wealth and the resources to be enormously helpful, but rarely are the resources well used.
- •The south has needs ... some are very urgent but resources do not get well allocated for priority needs.

#### **Foreign Direct Investment**

Foreign Direct Investment (FDI) is investment from outside the community ... and while there may be benefit from this investment in the community, this is going to be some share of the total benefit arising from the investment. Experience shows that this share may be quite small, and maybe quite negative when all the social costs to the community are taken into account. The split of value added is critical to the success of the

local community, and almost always a deep secret probably because the share attributed to the community is so small.

#### **Sustainability**

Sustainability is a fashionable idea ... but with many meanings. One is that sustainability is to do with damage being done to the environment by the human race ... and the issues of the survival of our specie. Another is more pedestrian relating to the ability of a person or an organization to have enough financial resources to pay its bills and survive economically. One view of sustainability relates to the environment. Are economic activities doing excessive environmental damage or consuming too much of resources?

#### COST/ANALYTICAL ACCOUNTING

#### **Cost accounting**

Cost centers, profit centers, investment centers, departments, etc are all rather similar. The key is to understand what they are doing and what they are costing.

If what they are doing does not seem to have any value ... then some further questions need to be asked and decisions made.

Corporate accounting systems usually have very effective cost accounting capability, but getting useful information from these systems is not always obvious.

#### Unit costs, prices and values

Unit costs, prices and values are very informative ... they make comparison easy both over time and from place to place. There are some challenges because units of measure and currency exchange rates may confuse ... but when these issues are taken into account, unit costs, prices and values are very powerful.

#### Cost, price, value

Cost, price and value are three numbers that describe economic activity. The relationship between these numbers determines the performance of almost any economic activity. All of these measures are important ... any one missing and the

understanding of the dynamic of societal progress is compromised.

#### Cost, price value and productivity, profit and impact.

Three critical metrics in understanding economic activity are: (1) cost, (2) price, and (3) value. The relationship between these numbers determines the performance of almost any economic activity. All of these measures are important ... any one missing and the understanding of the dynamic of societal progress is compromised. These metrics are a part of a further three critical indicators: (1) productivity ... productivity improves when less cost produces more goods or services; (2) profit ... profitability improves when price is increased and cost is decreased; and (3) impact on society ... impact improves when the value increases and the cost decreases.

#### Cost

Cost has multiple components, and one of the most useful data points for cost is the one that eliminates all the profit elements from the cost value chain. The socio-economic success of the last two centuries has been reduction in cost.

#### **Price**

Price is a key variable in the performance of society. It is not as important as cost, but the way price is used in society determines the way value is shared between the various economic actors.

#### Value

Value is what the recipient thinks it is worth. These relationships are key:

- •When value is greater than cost there is value adding.
- •When cost is greater than value there is value destruction.

#### **Productivity**

Productivity is a derivative of cost ... productivity is the most important single metric for the performance of our global society. In broad terms science and technology has made it possible for society to live very comfortably, but leadership has not made the

decisions that embrace what is possible for the benefit of a broad society but for narrow self interest.

#### **Profit**

Profit is the relationship between cost and price, and has an impact on the stakeholders of the organization. Profit measures the performance of an organization, but does not bring into account the costs to society, or on the positive side, the value derived by society. Profit is the key metric for capital markets, and profit drives corporate stock valuation. Unfortunately profit and valuation now has taken on a life that is far removed from corporate operations and the impact of these operations on society with serious consequences.

#### Value ... impact on society

Impact on society is a function of value and cost, but not only these metrics. Price has a role in allocating how added value is shared between different segments of society and across the value chain. Community accountancy explicitly addresses this matter both at the individual community level and across complex value chains.

#### **Management accounting**

Management accounting is a subset of accounting that helps to get useful analysis into the hands of decision makers. Management information is sometimes defined as the least amount of information that is needed to make good decisions reliably.

#### **Department costs and the variants**

A cost center is one way in which costs can be organized to help understand and control costs.

By pulling costs together within a unit called a cost center, it is possible to get information about a company's activities in a simple way.

#### Responsibility accounting

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Responsibility accounting is the name given to accounting where the reports specifically identify the responsible managers. This is a useful technique for getting clarity about who is responsible for

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