

MEANINGFUL METRICS FOR A SMART SOCIETY



The Basic Concepts of True Value Metrics

CHAPTER 1 INTRODUCTION AND CONTEXT

**DISCUSSION DRAFT
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Chapter 1-1

About Peter Burgess

Background

NOTE: This section is written in the first person. The rest of the book is written in the third person!

I trained as an engineer. I did an undergraduate degree in Mechanical Sciences at Cambridge University, and subsequently did design engineering in heavy engineering for the Davy Ashmore Group based in Sheffield, England. At the time, the company was working on integrated steel mill projects all around the world including India, Turkey, Mexico, and Finland as well as several big projects in England, Scotland and Wales.

I also read economics at Cambridge ... and subsequently trained with Coopers and Lybrand in London and was articled to Brian Maynard. Subsequently I became a Chartered Accountant. It was a “wake up call” to see separately the power of engineering and the power of accountancy and to understand what a waste because of the almost non-existent coordination or collaboration between the different “silos” of professional development.

I traveled extensively as a student both in Europe and in North America. After several years of professional accounting and audit work in the UK, I migrated to Canada and obtained a position as a field accountant with HA Simons, consulting engineers, based in Vancouver BC, Canada. My field work took me to several assignments including major projects with the general contractor Brown and Root in Texas.

Subsequently I worked with Aerosol Techniques Inc. of Milford Connecticut, Gulton Industries of Metuchen New Jersey and Continental Seafoods Inc. of Secaucus, New Jersey and their subsidiaries. These companies could not have been more different in both industry sector ... consumer products, high tech electronics and international fisheries ... and in the character of the companies.

After more than 15 years of professional and corporate management, I became an independent consultant based in the USA with a focus on management and international initiatives. This led to some long term associations with some interesting companies, and with the World Bank and the United Nations Development Programme (UNDP) ... and eventually to a lot of work associated with the official relief and development assistance (ORDA) sector.

My journey with information technology (IT) and management development has been long. During my work with Coopers and Lybrand I worked on the audit of one of the first commercial computers built to do business computing ... at EMI just outside London. EMI, a leading electronics company had built the computer itself, and used it in one of their subsidiaries ... EMI Records, that was involved with the distribution of Beatles records. The audit was impossible ... but there were enormous lessons learned. At this time almost all accounting was done manually with the assistance of “bookkeeping” machines. There was a premium on being organized, and with “organization it was possible to do amazingly fast reporting of financial performance, even though the business was very, very large.

At HA Simons, a new computer was being used to manage the money aspects of all the firm's major projects for pulp and paper mill construction oversight ... simple budget and expenditure control, but very powerful because it was timely and closely integrated engineering design with money accounting. I developed a field cost audit technique using budgets and standard costs that made it possible to manage contract costs very precisely right from the start of a project ... and went up against the contractors Brown and Root based on this methodology.

In the late 1960s, Aerosol Techniques installed a mainframe computer ... which initially did not work. I became responsible for fixing the problem and making the computer do something useful for the company. The Harvard based Management Analysis Center consulting firm worked on this as well, and several Harvard Business School cases were based on the work. The company had been very profitable and available cash had been invested in facilities expansion ... but not well ... beautiful architecture but poor production engineering. My cost analysis showed that no amount of cost reduction would make the main new factory investment contribute to profit ... no way, no how! The most unpopular short report in the company. I did a lot of other work on cost analysis and how to make products contribute to profit ... costs depend on the product design and the factory process, not on how the accountant fiddles around with the numbers!

Gulton Industries was an early enabler of the computer era as a leading edge developer of miniature ceramic components for electronic systems ... their microceramics division. This led to military and space work where size and weight were important. The company supplied power supply equipment and communications equipment to the Apollo program and it was Gulton equipment that was used in the conversations from the moon! For internal management Gulton did things in an “old fashioned way” ... numbers on paper, but used them to manage high tech work! More cost analysis ... and identification of pieces of the business that were highly profitable, and those that were big and a huge drag on profit performance. I was given the assignment to be Controller of the Gulton subsidiary, Southern States Inc, near Atlanta, Georgia ... more cost analysis ... and then a decision that for this unit to improve profit performance it would require drastic management action. The President and three out of five vice presidents were removed ... and everything went better ... engineering ... marketing ... procurement ... production ... profits! I was put in charge of “Admin” and was also VP Manufacturing in the new operational structure! One of the production departments was a foundry ... this operation was critical to the whole production cycle and operating at full capacity on a two shift basis, and limiting everything else. My solution was a third shift ... which was met with fierce opposition. What else to do? No suggestions, so the third shift was implemented. The opposition was right ... costs were high, production was abysmal. Why? I turned up at 2 am in the middle of the night unannounced ... everyone doing nothing ... a key machine broken down. No maintenance ... not enough supervision. I called the maintenance manager ... 2 am ... and asked him what the problem was? Within days, with real supervision and adequate maintenance the night shift became the best of the shifts ... and proud of what they were doing! Another story associated with the foundry was the long time use of average cost ... cost per pound ... to do casting design. With this method engineers were encouraged to make castings lighter and lighter to “reduce costs” ... but in fact were doing exactly the opposite. The behavior of cost in a foundry depends on many factors other than the weight of metal including the shape of the casting, the quantity being made, the process needed for the specific casting, scrap rates, the type and quality of the mold and so on. These are standard process elements, and designing to reduce cost of each of these changes the dynamic ... higher production, lower costs, better castings. It was also at Southern States that I used production reporting to improve production performance. A routine daily production report was circulated to “management” and department supervisors next day mid-morning ... it

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showed what had been produced, and most people knew what should have been produced, so they had an idea of how well the factory was doing. It was an excuse for a cup of coffee and a conversation ... not really very much more! As the new VP Manufacturing, I had the report modified so that every supervisor estimated the production they anticipated for the day half an hour into the shift. By 8.30 am we all had an estimate of production for the day ... and we knew ... and maintenance knew where the problems for day were located. By 9 am the problems were being fixed ... and by the end of the day record production day after day after day! This is a simple application of engineering control theory ... very simple ... but very powerful!

Continental Seafoods (CSF) was a completely different experience. In some ways a very small company, but it had operations in 26 different jurisdictions around the world, and was involved with a very complex array of different legal business issues that affected operations and the way the accounting was done. Every country has its own business laws ... and their own fishing laws, rules and regulations, etc. There are international rules about ownership, flagging and insurance of vessels. There are rules about international trade, export taxes and import duties. There are rules about employment of local staff and rules for international staff ... about benefits ... about hiring and firing ... about taxes ... and remittances. There are fluctuations in market prices and fluctuations in currency exchange rates. There are very long supply chains for spare parts and everything else ... and getting materials through customs may or may not be quick and easy! I had to learn more to do the quite modest job of being CFO for this company quickly than at any time in my life. The CSF team were very accomplished ... and the operational staff were able to do amazing things as soon as there was some clarity about what needed to be done. When I joined CSF ... about six months after a new President and CEO had been appointed ... the company was in a cash flow crisis and very unprofitable. I was able to help focus the turnaround on what would make a difference very quickly ... and then do it with our very limited resources. On my first visit to our operations in Liberia in West Africa I see most of the fishing vessels at the dock as I fly into the country late Saturday afternoon. I am met at the airport, and taken to the best hotel in town ... and checked into the best suite ... and then advised that they would pick me up Monday morning to come to the office for a meeting! Sunday morning ... I take a taxi to the seaport, find the CSF office and announce myself! After the initial shock, I get a tour of the vessels, and the facilities ... production plant, cold store, maintenance workshops, spare parts stores, etc. By lunch time I have a pretty good idea of what is going on and what sorts of problems they are trying to handle. It became pretty clear that the head office had been a big part of creating the current operating problems in the field ... spare parts inventory was on the books at a very big number ... but none of the spares were useful to keep the current vessels running. Most of the spares were old, and were only useful for vessels long since discarded ... but the old management did not allow the proper valuation for the spares and the write-offs this would create! That Sunday afternoon a list was made of the spares needed to get the vessels back in service ... almost \$500,000 of spares ... and it was telexed to the home office. By Thursday most of the spares arrived at the airport and were on the vessels very soon afterwards and the vessels went back to fishing again. The profit contribution to cover the cost of these spares was made back in about 10 days! My position about financial controllership is that the job is to make it possible for operational managers to do excellent work ... and not to get in the way! I forget what we did on Monday when they originally planned to meet me!

After almost 20 years of professional work and corporate employment I started a small consultancy firm. It had little success in domestic US consultancy but did better doing work in the international area. I did my first consulting assignment with the World Bank in 1978 and did many more over the years. However, it was a deep shock to see the state

of management information in the official relief and development assistance (ORDA) community and in government compared to what was now being doing in the private corporate sector. By the time I got into consulting, I was an enthusiast for management as a tool for achieving high performance, whatever the endeavor. I was completely unprepared for the way government and large bureaucratic organizations actually function, and remain concerned about this deficit.

I was totally unprepared for the impact deregulation had on business in the 1980s, especially in the United States. I understand the concept of “laissez faire” but in my book it does not translate into “anything goes”. The fact of fraud and misbehavior on the part of many people and organizations was a great disappointment ... and the fact that similar behavior is still tolerated in the higher levels of corporate and economic power.

There is much evidence that there has been significant manipulation and fraud in achieving high profits in the deregulated environment of the past thirty years ... but getting high socio-economic performance for society in this setting has been difficult. The problem is not people ... the problem is a system that has metrics that ignore everything except profit and data that moves capital markets higher ... the problem is a system that ignores every single aspect of investment in society.

Though my success has been limited ... I have had the opportunity over the years to work and do assignments in more than fifty countries round the world ... I have worked at different levels of the economy from refugee camps and rural communities to national level planning and oversight. Some of my work has been very practical ... some quite academic!

From my background and experience, I am clear that something different is needed that will help to improve the management of resources. What is needed is a combination of “system” and “movement” so that the power of management information can be available not only to a small rich powerful elite, but to everyone who is interested in an improving society and doing the best right thing!

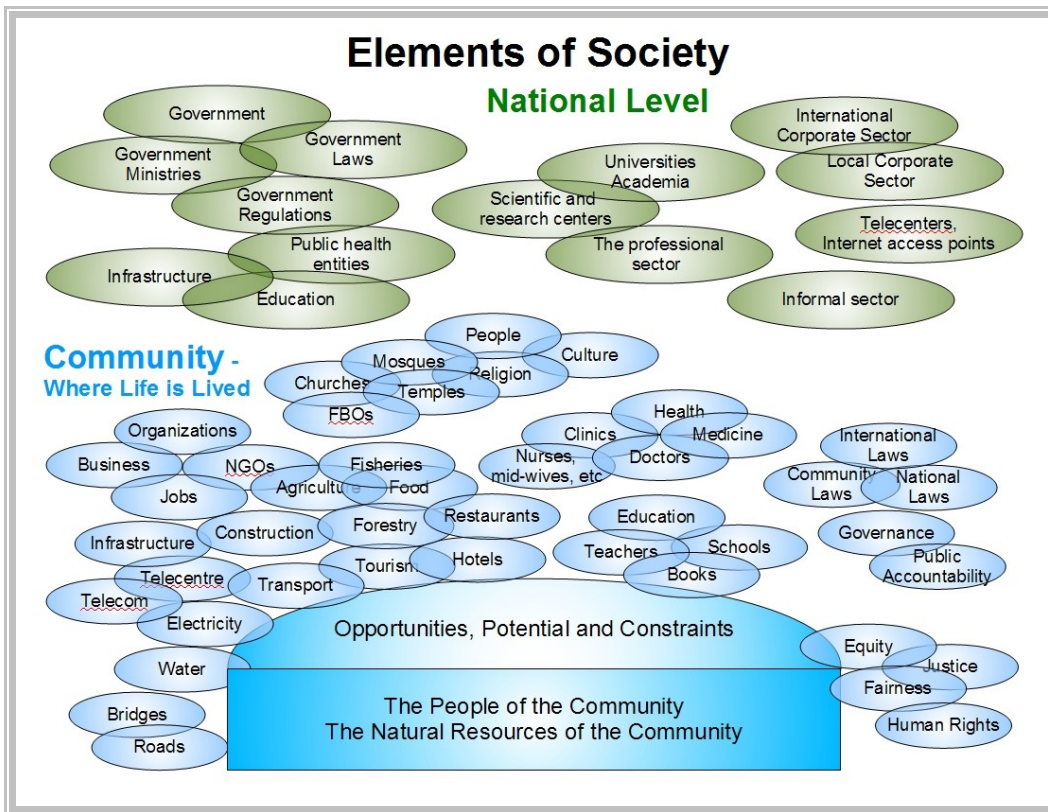
Chapter 1-2

Context ... The World We Live In

Extreme Complexity

The many elements of society

There are many elements of society that make it complex. The following graphic shows some of this complexity ... in a very simplified manner. There is complexity at the national level and the international level (not shown) and all sorts of complex detail at the community level.



Society and economic activity are complex ... with many different organizations and structures that make up the whole.

More understandable at the community level

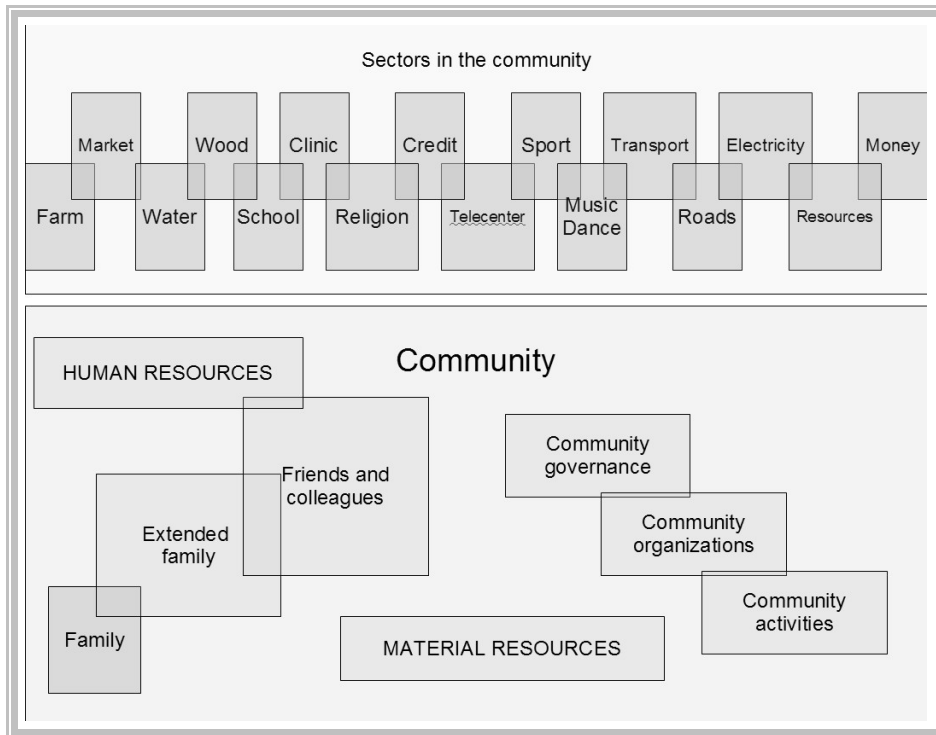
In the community where life is live there are all sorts of activities and organizations. The complexity is real, but on a scale that is understandable.

1. There are people and families and communities.
2. There are people and activities and projects and organizations
3. There are buildings, blocks, neighborhoods and communities

4. There are activities and sectors.
5. There are no simple relationships ... there are many variables.

An aggregate or average is not very useful for decision making ... what is needed is granular data that reflects a real reality ... not a distant derivative of reality! The community is where people live ... and a lot easier to understand. The complexity at the community level can be understood in a granular manner ... with cause and effect tightly linked. At the community level people have names, and are not merely part of a statistical pool. Activities are tangible, and data about costs and results much more easy to understand.

But there are complexities in a community ... and there are a zillion different ways in which simple analysis can go wrong. Every human being is different ... and this has the potential to be useful or to be a constraint in making progress happen. A place where there is progress is one where people have been able to organize so that there is progress, and other places where there is limited progress, it is because the human energy is getting wasted in one way or another.



This is a major simplification ... maybe somewhat simplistic. The point is that at the community level it is possible to use very simple observation ... “management by walking around” ... to understand what is important and what is not. Progress is going to be achieved when resources are applied to priorities that have a high relevance in the specific community and decision makers are held accountability for performance ... using objective independent metrics.

What gets measured gets done!

Governments, multilaterals and others

The overhead structure of the world's governance is big and complex ... and a big reason why it is difficult to make progress. The World Bank and the regional development banks that work in ways that are very similar to the World Bank have procedures and processes

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that are very “Top Down” and, in the main, very inflexible. The same goes for the United Nations and the various bilateral agencies.

Non-governmental organizations (NGOs) were intended to bring more private sector innovation and enterprise into action ... but where they get their funding from the public sector, they soon become the paid servants of the of the government, devoid of much enterprise and initiative. They maintain the “top down” way of working much to the detriment of potential beneficiaries.

Chapter 1-3

Pursuit of Happiness

Progress Is More Happiness Different from the pursuit of wealth

The Founding Fathers of the United States saw fit to write about “pursuit of happiness” but they did not make mention of any of the common measures being used today to describe economic performance like profit or GDP.

It is likely that they recognized that there were many different versions of happiness ... that happiness was subjective, and would depend on many different elements.

In TVM happiness is a big part of the value profile ... more important than either money profit or money wealth per se.

Profit and GDP not good measures

The business community uses profit as its main measure of success, and probably has done since the beginning of human history. But profit ignores the value flows associated with the business that impact community and society. Modern accountancy has become very sophisticated about the reporting of profit and the business world as a whole understands the metric and all the reporting associated with it. Maybe this is less true for the general public, and there are unfortunate distortions in the reporting of profit caused by laws, rules and regulations that make it possible to report inappropriately. Taxation rules, for example, are one area where distortions get incorporated into profit reporting.

In the modern era an important proxy metric for progress has been growth, and the dominant measure of growth is the economic metric Gross Domestic Product (GDP). This is a dangerous metric for society and the planet if ever there was one since it is based on the idea that more is always better. GDP has little to commend it as a measure for progress, except, perhaps that it is has a long history and is an reasonably easy metric to compile and publish, though it can be argued that even this is wrong because of the corrections and adjustments that are now incorporated in the measure to account for anomalies.

Progress is NOT more and more and more

Progress in quality of life is NOT more and more and more, but enough of some things and access to all sorts of other things. Quality of life is made up of many different sorts of things ... some is “stuff” ... some is services ... some is intellectual ... some is spiritual ... some is emotional. Beauty is positive ... ugly is not. Friendship and love are positive ... hate is not.

Happiness ... quality of life ... needs ... wants More people, more need

Basic needs must be satisfied at a minimum level in order for the poor to live ... and far too many people are dying because even these basics are unachievable. Quality of life is a mix of needs and wants ... a mix that is not at all uniform between individuals and

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cultures ... nor indeed among different age groups within a culture. The diversity of needs and wants that constitute quality of life makes quantification more difficult, but not impossible.

Needs originate with people ... no people and there are no needs. The more people there are the more needs there are.

There are some basic human needs ... the basics that are needed for survival. Beyond that there are other needs and wants that define who we are and how society recognizes progress and status. TVM recognizes that there is a difference in the value of a small amount of potable water required for human survival ... and the multi-gallon flows of water associated with high end flushing water closets and showers ... not to mention watering the lawn and washing the car!

More is good until basic needs are satisfied. In a shortage economy, more is a reflection of better ... but the global "North" produces more than it "needs" and more merely means that there is a bigger surplus. In a shortage economy, a bigger crop means that there is less shortage, and people are able to eat more and be in better health. In a shortage economy ... more is better.

Needs are not the same as wants ... though more and more a money focus society is trying to convert wants into needs. The purpose of advertising is to create demand ... wants that feel like needs.

Advertising ... misinformation

Advertising and misinformation is a part of the problem. Madison Avenue ... the world hub of advertising and promotion has done a great job of creating demand where there really is none. They are masters of spin so that people with almost everything still feel the need to go out and buy! GDP is driven by the amount that is spent ... about consumption ... no matter how silly the consumption and how little it is needed! Nothing wrong with enjoyment ... but not at the expense of others.

TVM includes information about needs in the metric framework ... including needs associated with the very poor, needs associated with the high consumption middle class and the commerce associated the very wealthy.

Basic needs

Perhaps as many as 2 billion people are struggling to meet their basic needs for food, water, sanitation, shelter and clothing. Healthcare and education are highly desirable but in most cases beyond the means of the very poor.

Poverty ... the \$1 a day metric

This absolute measurement of poverty serves little purpose ... other than to employ researchers and analysts. How many people are in the \$1 a day economy and how many are in the \$2 a day economy is not of great consequence. What needs to be known is how fast the progress in getting quality of life to be better is in a specific place ... a focus on the progress of people from their very poor status to something that is better.

The metrics should help to show what works and what does not ... and who are making good decisions and who are not ... and what issues most need to be addressed so that people know what to do.

For TVM, a better question is about the activities that result in abject poverty and what are the needs that poor people have so that (1) they may survive; and (2) they may progress.

Middle class quality of life

Most of what might be thought of as middle class needs are merely wants ... but they are the driving force of the modern consumption economy. There is a big service industry that has the singular job of convincing ordinary people that they “need” all sorts of things that are profitable to provide ... and are really not needed at all. In fact the consumer would be better off if much of what they are buying was never produced.

The conventional wisdom for many decades has been that socio-economic success is about the achievement of a middle class life style ... like the Americans. The problem with this is that middle class consumption using the American model cannot be achieved without rapid loss of the earth's natural wealth. With only 5% of the worlds population achieving this level of consumption ... natural resources are already stressed and it is difficult to imagine what will happen if 50% of the population were middle class .

For the global middle class, it is imperative that needs are redefined so that the ultimate is not simply “more and more” but something that reflects more quality and less quantity ... more happiness less “stuff”.

Luxury ... not needs at all

The world has a super-rich class and though small in number they can buy whatever they want using money from their very deep pockets. This big buying power supports a big luxury sector. Much of the commerce associated with the luxury sector does not satisfy need at all ... but serves high end wants ... more the satisfaction of ego and confirmation of elite status in society!

Poor and hungry Far more than there should be

Out of a total world population of more than 6.5 billion, it is estimated that more than 4.5 billion are poor and hungry. In a world where global surplus production is now possible, the fact of so many poor and hungry is a global disgrace. The decision makers and the leaders of society ... corporate, government and the economic elite ... should be ashamed of themselves.

Broad-based progress is possible. Better and better quality of life is a reasonable goal ... but better cannot merely be more and more consumption of goods and services and more and more accumulation of money wealth, but must be more and more of value creation and the accumulation of what might be called “value credits”.

Over the past century some people ... relatively few ... have been able to benefit from the abundance that has become possible because of advances in technology and in consequence productivity. But many more have continued to struggle to satisfy basic needs .. and the absolute number of people now poor and hungry is more than two decades ago ... more than five decades ago.

The prevailing money accounting metrics of economic performance associate growth with success. This is a fallacy ... way too many people are in situations where quality of life is totally unacceptable. In order to improve performance ... the first step is to get the metrics that measure the right things in the right way.

Top job: change the way the game is scored ... and we will change the way the game is played

Aggregate demand ... value destruction

Aggregate demand is a big metric in the modern money economy ... aggregate demand is the driver of corporate business volume, which improves profitability which in turn makes stockholders happy. But what does aggregate demand do for society as a whole. In some situations more aggregate demand would be a great indicator of progress out of poverty ... in other economic situations more aggregate demand may well end up facilitating more obesity. There is a difference and the metrics should be very clear which is which.

When community needs are satisfied by the community buying things, the community economy is on its way to being sustainable.

Chapter 1-4

The Sustainable Society

What Version of Sustainable

TVM serves all versions

Value construct is universal

TVM is about metrics ... that is data and analysis of what is and what could be, or should be. What something is called is less important than what something is ... and the data will show as clearly as possible what something is, what it was, and what it could be ... all in the context of what should be.

A lot of issues are subjective, but this does not matter for metrics that aim to report simply the factual reality. With TVM the issue of subjectivity and its variability is a part of the system.

TVM aims to be of utility whether the version of sustainability relates to:

1. a green initiative for a building or community;
2. the exploitation of mature tropical forest;
3. the mining of minerals;
4. fishing;
5. carbon footprint;
6. public transport;
7. or anything else.

Sustainable ... what does it mean?

In many modern settings the word sustainable is almost meaningless ... it has become a “fashionable” word, and is applied to anything and everything and means less and less the more it is used.

Sustainable ... used everywhere meaning nothing!

A recent conference (October 2010) at Columbia University in New York had “Sustainability and the Extractive Industries” as its theme ... arguably an oxymoron if ever there was one! Surprisingly this did not seem to bother anyone ... sustainability is very fashionable!

That is not to say the idea of sustainable should be discounted ... merely to be very clear about what is going on. In the case of the Columbia University conference the issues were very important but related to how best to use the revenues generated by extractive industries in the best possible way ... starting off from the premise that what has been going on for a very long time is essentially unacceptable ... essentially wrong!

An engineering metaphor

TVM uses an economic model for socio-economic progress that is based on the very solid realities of science and engineering. It is a very mechanical model of how an economy works ... not very sophisticated, but based on the observable connections

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between activities and outcomes at the the community level and very macro outcomes at the national and global levels.

In the main ... finite resources

TVM respects the fact that the world has a finite store of every economic input ... with the exception that energy from the sun is on an the astronomical scale.. In the global scheme of things, science, engineering and technology are all connected through ubiquitous laws of nature ... and economic laws have some similarity. The principles of Newtonian mechanics and engineering thermodynamics apply universally and preclude perpetual motion as an engineering outcome. TVM has a similar perspective about the dynamics of socio-economic progress.

Wealth ... origins are miraculous ... sun and life!

Wealth has its origin with the creation of the solar system including the planet earth ... a sun with astronomical amounts of energy, earth with finite amounts of many valuable natural resources and life.

Over time planet earth has accumulated more valuable resources by converting the energy of the sun into more resources ... what is today the deposits of coal, petroleum, etc. For millions of years the world was getting wealthier ... accumulated wealth converted from sun's energy and storing it.

This has all changed in the last dozen or so decades. In this recent period the world has started to consume its wealth at an accelerating rate ... and people have not been paying much attention. The accumulation of wealth by people and organizations has become a critical metric ... and the consumption of wealth once possessed by the planet is ignored.

Up to now the broad outcome of developing more human intellectual capacity has been to facilitate more rapid exploitation of the deposits of accumulated solar energy ... and more and more activities that consume these deposits. In the process we have used metrics that suggest that more and more consumption is the goal ... that more and more and more is a better quality of life, All of this is fundamentally wrong.

What are the limits on wealth?

Wealth ... using money metrics is finite and quite limited

If the process of transforming the wealth of the planet into the wealth of the people and organizations was efficient ... and reversible ... the matter would be less serious than it is. But in fact the conversion is very inefficient and not easy to reverse ... maybe even impossible to reverse . Fossil fuel energy that took millions of years to be accumulated on the earth by conversion from solar energy will get consumed in a few hundred years ... and the prevailing metrics for wealth only account for the accumulation of wealth by people and organizations while ignoring totally the consumption of wealth associated with irreversible consumption of the world's resource wealth.

More and more "stuff" hits limits

At what point does a "more and more" economy hit a brick wall ... or go over the cliff ... or become an economic train wreck? The money economic growth over the past two centuries has been very impressive ... but few see the practical ways in which this economic model will be working well in another two hundred years. Analysts worry about the model coming apart by 2020 ... in ten years ... or 2050 ... in 40 years.

What happens when the oil runs out? What happens when naturally occurring potable water is a distant memory? The answers are missing! The TVM engineering metaphor accepts that material and money wealth is finite ... and value based socio-economic performance has a whole lot more potential

Quality of life does not need to be limited

Value ... better quality of life ... may be created without the depletion of the earth's natural accumulated wealth. Value creation may be substantial merely with the use of human energy and intellect. Human intellect ... brain power ... has enabled people to make use of tools to do amazing things. Maybe ... just maybe ... the value creation associated with this could replace money wealth creation that has driven economic analysis for several hundred years.

There is a limit to exploiting the accumulated energy that has flowed from the sun over millions of years and is now stored in fossil fuels, soils and tropical forests. Money metrics do not take this into account, but it is accounted for in TVM.

In TVM human intellectual energy, quality of life and well being are assets ... good deeds, creating happiness and improving quality of life are as important as products and services. People and organizations should accumulate value wealth as well as money wealth and there should be improving quality of life without drawing down the natural wealth of the planet.

Will the planet's socio-economic system implode?

This is a big question ... and the answer is that, based on recent global leadership, that it almost certainly will. The idea that the big banks would become near broke was completely unanticipated by all the highly educated experts ... many of whom now seem to think that the problems have been fixed. These people are not residing in the real world but live in gated communities and work on the top floor of high rise banking towers totally out of touch with all reality!

Too big banks went broke!

“The big lesson from the financial sector meltdown of 2007 and 2008 is that organizations that are too big to fail do fail ... and only survive when they get humungous amounts of life support from somewhere. Big government provided the support pulling from ordinary people who had nothing to do with what the banks did to make themselves fortunes. Running the global economy in the same way that big banks were run is too big a risk and absolutely has to be changed. New metrics must be a top priority!

TVM is only metrics ... with a limited role. The aim is to good relevant metrics that are useful. This role is to get the metrics in place so that the major key issues are being measured ... and then it is up to others to take the steps to reform the activities and organizations involved with socio-economic activity so that there can be positive outcomes ... value wealth accumulation ... for people (quality of life) , organizations (profit) and the planet (replenishing nature's bounty)!

There is a sustainable dynamic

There is a sustainable dynamic for socio-economic progress. It is one where progress is funded by the surplus production of society ... that is the value adding of society is surplus. Nothing that is like welfare and dependent on those that fund welfare can be sustained for very long ... but there can be ... and must be investment in the future on a scale not often seen. Maybe this happened at the end of World War II ... but the world population is now much larger.

A sustainable society is one where there is an equilibrium between what is consumed and what is created. The dynamic of more and more “stuff” cannot be sustainable unless only a few have the right to have the “stuff” ... and this wrecks the business model that is all about more “stuff”. There is socio-economic progress when the activities of the community generate a surplus. The role of development assistance in providing subsidy

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for inefficiency must be converted to funding investment that results in improved productivity.

In most cases, socio-economic progress that results from external intervention is fragile because there are external factors that detract even though they are often undocumented and overlooked. In most cases external intervention is also based on a welfare construct about development aid, and unsustainable idea. On the other hand, funding that facilitates the capitalization of business that can supply all the needs of society both capital reconstruction and operational services is a sustainable approach.

The virtuous cycle of sustainable development

A dynamic planning framework with people at the center of everything creates value in the community and the broader economy. When people are the key resource, everything is possible at an affordable cost. People are both the beginning and the end ... they work to create value ... and they live to enjoy value. In a community where there is a positive value dynamic there can be sustainable socio-economic progress.

The question “Who is going to pay for healthcare?” for example, has less negative impact when healthcare are jobs in the community and the benefit is good health in the community. The community economy fails when the only investment ever made is to enrich outsiders ... and the community always succeeds when the investment adds value for the community.

The virtuous value chain works this way:

1. A workers gets paid wages for doing work;
2. If the work is valuable, there is more value after the work than before;
3. The worker can buy what his/her family needs with the wages;
4. The vendor of goods and services purchased has revenue; and
5. In turn the vendor can purchase what is needed to provide the goods or service.

Note that for the value chain to result in a virtuous cycle of sustainable progress, the relationship between the amount of the wage remuneration and the amount of the socio-economic value adding ... in other words, productivity is important. The same analysis applies as the wage money moves through the community ... the better the productivity, the better the progress.

Chapter 1-5

Why True Value Metrics Is Needed?

Prevailing Metrics Insufficient

Need value as well as money

Need connection with real life

The short answer is simply that prevailing modern metrics are a mess ... encouraging all the wrong decisions and there is a need for paradigm shifting improvement

The United States and other countries have governments that are getting more and more indebted on top of societies that are under-performing and organizational structures that are rewarding owners and managers earning high money profits at a huge social cost. The profits are accounted for, but social cost is ignored. From time to time there are scandals that highlight the problems ... but little gets done to improve the metrics.

Because the metrics are wrong ... decision making is wrong ... and unfavorable outcomes are the result. TVM aims to change this so that the metrics are right, the decisions are right and there are favorable outcomes. TVM is all about value metrics, but organizing these metrics in an old-fashioned business accounting way with balance sheet and operating statements that are one integrated reporting framework.

Prevailing metrics abundant but inadequate

The world is awash with statistics, investment analysis and academic study ... but in spite the volume, many key metrics that are missing and decision making is mainly about money profit metrics in ubiquitous use ... those that are about profit performance, stock market prices and GDP growth.

In broad terms there are two main issues with the prevailing metrics: (1) they have a singular money focus; and (2) the primary reporting entity is the organization. TVM is based on the premise that there needs to be a “value” dimension; and (2) the reporting entity should be the society ... specifically the community where people live their lives and work.

TVM has been created because something much better than the prevailing system of corporate profit, stock market prices and GDP growth is needed. National, government, corporate and social metrics are all inadequate. They do not help with understanding of the dynamics of society. Because the metrics are wrong ... decision making is wrong ... and unfavorable outcomes result. Something is needed that goes beyond the money metrics that are prevalent today.

Triple bottom line ... a complete system

The corporate "triple bottom line" idea ... that is “People, Profit and Planet” ... has been introduced recognizing that people and the planet, that is environment are dimensions of performance that should be taken into consideration would be worth having. In the prevailing metrics methodology the mainstream accounting system provides data for profit reporting and management information systems provide business performance data, while people and planet data are more or less ad hoc and out of the mainstream!

The Basic Concepts of True Value Metrics

Money accounting metrics facilitate the allocation of resources to create profitable economic entities and profitable activities. There need to be reliable metrics so that resources get allocated to activities that have socio-economic value ... whether or not they generate profit. This is what TVM does. TVM changes the paradigm for resource allocation because its metrics are about value as well as about money. Though money accounting is insufficient for effective management everywhere in society, at the national level, in government, in corporate business organizations and not for profits ... it is presently the only one that is widely used.

TVM adds the missing component. Science and technology provide some amazing possibilities ... but decisions about allocation of resources need to be made by people who are aware of both money profit and social value ... and accountability needs to be not only to the owners of wealth but also to all the stakeholders in the society.

Not more metrics ... better metrics

Modern information technology makes it easy to have more metrics ... more mathematical manipulation of data ... more statistics ... and ultimately more information overload. TVM is about breaking this information overload spiral ... a few meaningful metrics that are clear and just sufficient to get good decisions made reliably.

Many people seem to appreciate that better metrics are needed ... but the efforts to get better metrics seem to be based on the idea that more metrics will improve the situation when what is needed is a quite major rethink about what metrics are needed and how may they be obtained efficiently, affordably and in a timely manner.

The TVM initiative changes this aspect of metrics from more to less ... rugged and reliable but maybe not academically rigorous. TVM starts from the premise that the changes needed are not 2% or 3% but 200% or 300% ... and for this rather clumsy measured may serve perfectly well. Bluntly put ... people in abject poverty to not need a 2% improvement in their condition, but a 200% improvement ... and World Bank reports on global development where they have identified a 2% improvement in the GDP of a country with endemic poverty would be laughable if the issues were not so serious!

Good metrics are not free ... but very valuable

Good metrics are not free ... there is a cost that must be paid in order to have good metrics. The design of the data and the analysis must respect the fact that they must be cost effective ... producing more value than they cost.

More expensive metrics are not necessarily better ... more data about some things is a complete waste of money. The aim of TVM is that decision making is better, and everyone is accountable for socio-economic performance

The prevailing systems of metrics are a “hodge-podge” of dataflows and analysis that has grown up over years with every interest group “doing its own thing”. There is duplication at the data acquisition stage and in analysis ... and gaping holes in both. The idea that data may be used for multiple purposes is not widely practiced ... and too much data disappears into private archives never to be seen by any interested public.

Simply making better use of existing data has the potential to reduce data acquisition costs and increase the amount of relevant analysis. And ... bluntly put ... having accountants doing more data acquisition and less academics could produce an impressive improvement in data acquisition and analytical performance!

Chapter 1-6

What Impact?

What Impact Will TVM Have?

Data are very powerful

The impact will be huge!

The impact of TVM is going to be a better world that has a hope of being sustainable and has a better quality of life worth several hundreds of trillions of dollars!

The impact of good metrics is huge. When high profit value destruction is changed to lower profit value adding, there is an order of magnitude swing in the performance of society and in socio-economic progress. If the world adopted TVM true value metrics, there could be more rapid progress out of poverty and better decisions about important infrastructure improvement ... potential value swing several trillions of dollars.

Management information rarely uses academic rigor ... but is cost effective and reliable for its limited purpose. Good metrics can substantially improve productivity. This is an example in a factory setting simply resulting from the use of better metrics.

Timely data ... almost triple the production

A company changed its production reporting from “next day” for review and analysis to something that approximated real time. Instead of “fixes” never getting done, fixes were done almost immediately a problem was identified. With no more resources, the factory produced almost three times what it did before. This is an example of basic control theory in practice ... and an example of the potential for paradigm change in the way resources are managed to improve performance and quality of life!

The efficiency of the use of resources in most socio-economic activities has never been measured ... it is difficult to know how badly resources are used. From time to time there are studies and it is common for observers to conclude that government performance is an order of magnitude less efficient than equivalent privately managed operations. Part of this is the lack of meaningful metrics almost everywhere for measuring performance.

With better metrics ... better everything

Some people are quite happy to manage “by the seat of their pants”, but that is not the way best performance is going to be achieved. Even where there are detailed metrics as in the case of major corporations and the stock markets, the results for society may not be good because the metrics are about money more than they are about value. When value metrics are as prevalent as profit metrics a lot is going to change for the better.

Change the way the game is scored, it changes the way the game is played.

Paradigm shift will change everything

TVM can facilitate paradigm change ... and through this there will be impact ... if for no other reason than an improvement in the way socio-economic scorekeeping is done will also change the way socio-economic decisions get made. It is a an accepted reality of management that metrics are important.

What gets measured gets done!

The money measure scale of the modern global economy is several hundreds of trillions of dollars. All of these resources are flowing because of money profit decision that are made with most of the decisions ignoring totally all the negative value destruction associated with the earning of returns.

There is a record number of money billionaires in the world ... and at the same time a record number of people who are poor and hungry. A socialist agenda to give the rich peoples' wealth to the poor is fatally flawed ... but a social agenda to have decision making based on both profit return and value return could add trillions of dollars to the profit and value creation that improves quality of life for everyone.

When value is measured as much as profit, then decision making will change and quality of life will improve. The capacity of technology to be a partner in progress will be realized more rapidly when profit potential is supplemented by value potential.

With TVM, good decisions are recognized ... while decisions that destroy value are identified and the reasons for this ascertained. Experience suggests that the difference between an environment where good decisions are being made and one where “anything goes” is not a percentage point or two ... but an order of magnitude or two. In other words, if good data and facts are used for decision making, and resources are properly allocated and deployed, the value adding can be improved by between 10 and 100 times.

The elimination of poverty called for by leaders like Professor Muhammad Yunus is possible ... but it requires way better decision making and allocation of resources than we are normally seeing.

Profit is often value neutral or value destroying ... modest changes in how profits are made can make a huge difference in the value adding of profit making.

TVM is not the old EVA

EVA ... Economic Value Adding, a trade marked initiative of a US based consulting firm in the 1980s helped the corporate business world to mobilize its resources so that there would be the maximum of money profit value from the business activities. TVM is different in that the aim is for resources of business and society to be used so that there is both money profit value and value value for the society as a whole and a community in particular.

TVM changes the way activities get measured. It is not simply about how much has been done, but what impact there has been and what value has been added as a result of doing something. Good managers have known this for a very long time ... but many big organizations have adopted systems of management and accountability that have put focus on measures ... quantification ... without a deep understanding of what is happening to deliver results to intended beneficiaries. Other organizations have evolved their systems so that donors are informed while the work being done goes without meaningful metrics.

The goal of TVM is not merely to deploy a value based accounting system ... but for a TVM based system to change the way major resources are allocated ... and for this to result in an improvement in productivity and quality of life.

NGO performance reporting

Presently, as much as 90% of the data being reported back to donors in the NGO and not for profit world relates to how much has been done. Almost no data are reported about the impact and value adding that is being accomplished. Rather NGOs tell stories about a single individual ... often heart rending ... and add images ... but these are not meaningful data about anything. It is PR that is available for both highly effective organizations and those that a high performance scamming operations and no way to tell the difference.

In theory, the reason for allocating resources and doing the work is to get a result. The result has a value ... money profit performance and a social value which may be quantified and translated into some money equivalent.

In the case of health interventions the impact should be more good health ... and good health has value.

In the case of education, the impact is better educated students and then the population ... with a high incremental value. In the case of education, the value may only be realized if there are limited economic opportunities for employment or profitable business. With no opportunities, the value of education is largely wasted.

Potential huge impact

When the leaders of the capital markets are using value as much as they use profit, then there will be major changes in the way global capital market resources are allocated.

Social investment potential huge and untapped!

The organizer of a recent major conference on Social Capital (SOCAP10) made the observation that the social capital market may be a \$1.5 billion market already in 2010 ... even before formal value reporting goes into effect. People know the importance of value ... but cannot do what they would like to do simply because the metrics are inadequate!

The progress of modern science and technology has been far greater than most would have predicted fifty years ago ... and it is clear that much of the potential of this progress remains unrealized.

When decisions are made in a timely manner using meaningful data, decisions can be very much better.

Example: Timely production reporting

When the factory reporting system at Southern States Inc., a manufacturing company in Georgia USA, was modified to provide performance data very rapidly ... in fact 20% into the day shift today rather than 24 hours later tomorrow ... factory problems were identified in time for them to be fixed before they caused lost production. Simply changing the timeliness of important data and factory started delivering consistent record production with not other changes or investment.

The Basic Concepts of True Value Metrics

The potential for better metrics to change the paradigm of performance means that several billion people in abject poverty today should be emerging from this state in a few years ... at the same time the middle class becomes happier if not money wealthier ... and in the economic totality the rich elite can stay rich and elite, but no longer holder the world to ransom!

Difficult to quantify

It is not easy to quantify these outcomes, but it can be done using a system of standard values for the value of outcomes in the community setting. Some outcomes have a money cost and a price when they are purchased ... but many do not.

Standard value ... a 25 year old

A 25 year old with a good education, in good health and ready to work in a high paying job in the United States for several decades has a huge value ... maybe something like \$4 million just in future earning power. A 25 year old with little or no education, undernourished and in poor health in a poor village in a developing country with no work prospects has little value based on economics and future earning power ... and represents some millions of dollars of lost opportunity!

Hundreds of millions of children will grow up to be of little economic value unless good decisions are made about socio-economic investment. Every child that grows up without education and skills, and with compromised nutrition and health is a multi-million lost opportunity. Add it up and the impact of good decisions is trillions of dollars of better socio-economic performance.

Any community stands to benefit when good decisions are made for the community ... whether the decisions are being made by local leaders, local citizens, local organizations or outsiders. Most communities are missing opportunities because poor decisions are being made.

TVM does not constitute a benefit ... TVM is not in itself of value ... but good decisions that result in good activities is where the value lies!

Community micro-up decision making

TVM helps to change the framework for economic activity and specifically the locus of decision making ... a paradigm change so that the concentration of economic money wealth and power in very large centralized entities will be offset by local decision making and local implementation of economic activities. People who are near a problem often have an understanding of the problem and how it might be solved most effectively. When people solve their own problems, amazing progress can be made. Small things can have huge leverage.

Decision making done to optimize local impact may be an order of magnitude better than any decision made by centralized decision makers, no matter how well intentioned.

The Shenge Project ... an amazing success

The Shenge community in Sierra Leone has the modest support of a small multi-sector integrated community development project of FAO funded by UNDP. The project facilitated training, acquisition of materials and ideas about business organization so that with timely decision making and modest allocation of resources, socio-economic progress was enormous and very rapid. The projects removed constraints ... gave nothing away ... and created a self sustaining progressing community.

The project was a great success ... but then the country failed! A great little success was overtaken by a global economic system that accepted mayhem as an acceptable cost to satisfy demand for diamonds and a willingness of international profit seekers to supply weapons.

Removing constraints on possibilities

A society that matches the needs of people and quality of life with the potential of people to satisfy needs and improve quality of life has unlimited potential. While material resources are finite ... the human resource is abundant, and human intellect has reached a point where big problems can be solved as long as the goal is properly defined.

TVM can contribute to progress and performance ... to improve quality of life by helping to provide meaningful metrics about what is the “state” and what “progress” is being achieved and the performance of society in making this progress ... the cost efficiency and the cost effectiveness.

All winners and no losers is not an impossible dream ... but it does take work to optimize the use of resources. With TVM all segments of society will progress better than will be possible without the deployment of TVM ... many times better. Everyone! Meaningful metrics that include the value dimension makes it possible to demonstrate that socio-economic progress can be win-win for everyone rather than being a zero sum proposition where one group wins at the expense of the other groups.

Perhaps, most important TVM has the potential to stop stupidity ... and to limit the abuses of greedy people and corrupt organizations. If ordinary people knew how bad the decision making is in major organizations handling millions if not billions of dollars, they would be appalled.

A paradigm change is possible!