Community Impact Accountancy (CIA)

ELEMENTS OF CIA
An introduction to Community Impact Accountancy based on a slide presentation – April 2008
CAVEAT
A work in progress – rapid multiple changes are being made

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# Community Impact Accountancy (CIA)
## ELEMENTS OF CIA

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Why? ...
There are no metrics that handle the complexities of modern socio-economic development that are easily available to the public.
Socio-economic performance has been poor with multi-billions still in poverty ... and socio-economic metrics do not provide the management information needed to improve the performance and end the abusive mis-allocation of scarce resources.

What is CIA?
Community Impact Accountancy (CIA) is a system of analysis based on GAAP type accountancy that includes ALL economic activities and actors rather than just the organization activities.
CIA includes impact on society and the general public, and not merely the stockholders and the stakeholders of the organization.
CIA is to the community what the system of national accounts can be to a nation.

How does it work?
CIA works very much like organization GAAP accounting, except that the all economic transactions are taken into consideration rather than just those that relate to the organization.
The concepts of double entry apply ... the rules for consolidating entities ... the idea of balance sheet and operating activities ... etc.
Data originates where economic activities are going on ... and are accumulated systematically using sound accountancy principles.
Cost, Price and 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 society impact is compromised.

Productivity, profit and impact on society ...
These measures are all derived from cost, profit and value.
Productivity is a derivative of cost ...
Profit is the relationship between cost and price, and has an impact on the stakeholders of the organization.
Impact on society is a function of value and cost, but also price which determines the share of value that accrues to society.

How do you measure?
Cost is easy.
Price is easy.
Value is more difficult ... and all the more reason for having it central to the analysis system, and being able to prepare reports that look at results from different perspectives.
While making absolute determinations of value ... it is common for relative determinations of value to be made, and this is included in CIA.
ACCOUNTANCY CONCEPTS

Community Impact Accountancy

The Basic Double Entry Concept

1. There are two sorts of accounts that together balance:
   A. Balance Sheet Accounts
   B. Income and Expenditure Accounts

2. In organization GAAP accounting the balance is for the activities of the organization. In CIA accounting the balance is for the activities of the community.

The basic double entry concept ...
This is a powerful idea that has lost some of its importance with the use of computerized accountancy.
Worse, the aggressive use of financial engineering to create the appearance of value merely by re-presenting the reality. It may fool some of the time ... but not everyone all of the time.

Community Impact Accountancy

Balance Sheet

1. A balance sheet is accountancy shorthand that describes the financial condition of an organizational entity. It shows assets and liabilities and the difference between them.

2. A balance sheet shows with very few numbers the impact of thousands or millions of individual financial or economic transactions, and comparing the balance sheet from different dates makes it possible to measure progress very tangibly.

Balance Sheet ...
The balance sheet is one of the most powerful analysis tools in accountancy ... critical in corporate financial analysis ... but alas, missing in much of public sector financial reporting.
The balance sheet concept is embraced in the UN System of National Accounts ... and is a key part of the CIA system. By using CIA balance sheet analysis at the community level, tangible metrics about progress can be obtained and lessons learned.

Community Impact Accountancy

Operating Statement

1. An operating statement (profit and loss account or income and expenditure account) shows in summary form all the costs and all the revenues or income in an organized way.

2. The information from an operating statement shows the way in which the balance sheet. In GAAP accounting these data apply to the corporate organization ... in the CIA system, the data include value to the community and social impact.

Operating statement ...
... or profit and loss account, or income and expenditure account ... all serve to explain the use of resources and what was received in return.
While the balance sheet is useful in describing how much change has happened ... the operating statements serve to explain how the change happened. The operating statements can be in summary ... or in great detail depending on the need for analysis.
Transactions ...
Transactions are the source material for the preparation of accounts and financial reports. Accounts are nothing more than a summary of transactions prepared in a common organized manner ... anything more, and the reports cannot be said to be a true and fair representation of the activities of the organization. Transactions are the foundation of metrics based on accounting.

Data accumulation and storage ...
Regular pre-computer accounting used day books and journals to record financial transactions and to start the process of accumulating the information. After compiling information in a daily record, the information was then “posted” to accounts where the data starts to have analytical meaning.
In a computerized world, storage is now electronic, but the concepts of organization do not change.

Analysis and reporting ...
The process of collecting, organizing and storing data has a cost, and not much value. But analysis and reporting makes these data valuable and powerful.
Analysis may merely confirm that what was expected has happened ... or it may help to deepen understanding and facilitate new and better ways of creating value.
CIA data have the potential to become some of the most valuable data on the planet.
Data collection
In a corporate setting, data collection is done throughout the organization, and recorded in a systematic way. For CIA data collection has to be done throughout society, and recorded in a systematic way.

Data collection can be done by anyone and everyone. If you know something, CIA provides a place for this information to be used as a part of the body of data that are needed for a universal system of CIA.

Data logistics
A key is getting data from the person that knows something to the CIA system.

The fall back system is for a piece of paper to move from a source location to a central place. But this can also be done using electronic means, including a mobile phone, an Internet message, floppy disks and CDs.

The key to use of technology is to ensure that the costs are low relative to the value of the data.

Data validation
Data validation is critical. If the data are valid and respected, the data have power.

Data validation must be integral to the data collection and logistics of the system. Everything must be checked and controlled so that only good and valid data are used.

Audit is an independent exercise that can be used to confirm that the internal checks are sound and reliable ... nothing more.
AUDIT, INTERNAL AUDIT AND M&E

Audit
Independent audit is a requirement in most corporate settings. Government accounts are also subject to audit, and usually by government auditors.

The aim of audit is to get an independent view of the accounting system and the reports being prepared for the stakeholders. However, it is weakened by conflict of interest and the need for accountants to continue being paid for their work.

Internal Audit
Internal audit helps to make the independent audit less costly, and can also help the management of the organization get alternative feedback about the performance of the accountants and the correctness of their reporting.

In CIA an approach using internal audit is desirable, in large part because the success of CIA will depend largely on the reliability of the data and the reports being made.

Monitoring and Evaluation
Monitoring and evaluation (M&E) has been used in the international relief and development arena as a management tool. It has been used instead of adequate management accounting and related reports, and has been largely ineffective because M&E is usually too little and too late.

CIA will use some M&E techniques but as part of a routine of timely management data collection, analysis and reporting.
**COST ACCOUNTING**

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<td>1.</td>
<td>Cost accounting is a part of accounting that informs about how much things cost. In the corporate enterprise the cost systems are well developed and are used intensively.</td>
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<td>2.</td>
<td>In the not for profit organization, cost systems are much less developed and analysis of costs is rarely integrated into the accounting systems, but done rather as &quot;ad hoc&quot; studies or as part of a monitoring and evaluation exercise.</td>
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Cost accounting ...

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

More and more detail may not be the best answer ... ability to look at data in different ways may be more useful.

Cost accounting is a powerful tool ... but it needs to be in the hands of an expert.

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<td>1.</td>
<td>The cost center is a common technique in accounting regular GAAP accounting to cumulate costs so that they are easily understandable and can be related to a tangible entity.</td>
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<td>2.</td>
<td>CIA also uses the cost center concept to pull together all the cost information about an activity or activities.</td>
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Cost center ...

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.

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<td>1.</td>
<td>The profit center is similar to a cost center, except that the profit center also brings in the revenue side as well as the costs. Variants include using contribution instead of revenue.</td>
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<td>2.</td>
<td>In CIA applications the goal is to link costs and value adding. The same concepts that link cost and revenue works also for costs and value. Where there is activity, it is possible to go to the activity value analysis using standard costs and values.</td>
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Profit center ...

A profit center is a version of a cost center ... in this case not only costs are associated with the unit, but also the revenues of the unit. This may or may not be useful depending on the structure of the company and the internal value chains.
**MORE COST ACCOUNTING**

**Community Impact Accountancy**

**Department Accounting.**

1. Department accounting is widespread in GAAP accounting. It informs about the costs of a department. Sometimes the costs are linked to revenues or activity levels.

2. In CIA applications, analysis of costs between activities in the community provides useful additional understanding. Department accounting and cost center accounting are similar, with cost centers often more detailed than the department.

**Responsibility Accounting.**

1. Responsibility accounting is a variant in GAAP accounting that aims to be very clear about who is responsible for the results being reported. Each page of a financial report is associated with a specific individual or team.

2. In CIA applications, a similar approach can be used to help the public to identify responsible individuals and units and to hold them responsible for performance.

**Materials, Labor and Equipment.**

- Materials ... the foundation for most economic activity, and sometimes a catalyst for improved performance.
- Labor ... potentially both a contributor to production and a beneficiary of production.
- Equipment ... often the catalyst for improved productivity.

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**Department accounting ...**

Almost all companies will have department accounting so that the costs of a department can be understood and controlled.

A department may have multiple cost centers.

**Responsibility accounting ...**

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 what ... and there is rarely much agreement.

Not easy for the accountants ... but can be very effective in getting the management team to stop dodging their role in poor performance.

**Materials, Labor and Equipment ...**

Materials, labor and equipment are the elements that go into most production activities ... and determine costs.

But these items also determine the behavior of costs and how costs can be improved.

The interaction of these three elements can be optimized not only with respect to cost, but also the quality and the value.
Standard costs ...

Standard cost accounting is a tool that has helped cost accountants measure cost performance without getting deeply buried in detail.

Standard costs are the theoretical cost that an item or service should have ... and when the actual costs are different, then it is time to find out why.

Standard values ...

The same approach is used for value as for cost. Every activity produces something ... what is the standard value of this output? This can be determined in an arbitrary manner, and then it can be used in an analytical framework, and compared to alternative values that are justified from different other perspectives.

The common standard allows comparison across geography and projects ... while not excluding alternative perspectives.

Standard, actual and variance ...

Having cost standards may be interesting, but usually not very useful until they are compared in some way with the actual costs ... the variances analyzed.

When there is variance analysis, it is possible to find information that is simply wrong ... or performance that is quite different from what had been assumed. All interesting and important ... and a guide to hat needs to be done to have improvement.
Behavior of costs ...
Corporate profit performance has been optimized by a deep understanding of the behavior of costs. Cost accounting and the analysis of cost behavior has a very long history in corporate management ... but its equivalent is practically non-existent in the public sector and in the international relief and development arena.
Understanding costs is essential ... and central in the analytics of CIA.

Behavior of prices ...
The behavior of prices is complex, impacted by both market forces and issues of cost behavior, productivity and profitability.
Within the CIA analysis framework, prices are of less importance than in corporate financial analysis ... though prices do impact the behavior of the value chain, being the element that moves value from one entity to another.

Behavior of values ...
Value is a simple idea, but less simple to include in a universal system of accountancy.
Value behavior depends on many factors ... many of which vary quite rapidly. Food has a huge value when a person is starving ... and water when there is a drought ... and medical supplies when one is sick ... and a job when one is unemployed.
But the value is different when they are not needed. What is right? ... the answer is both!
### ABOUT CONSOLIDATIONS

**Community Impact Accountancy**

**Consolidation.**

1. For organization accounting, the idea of consolidation is to be able to present one report reflecting the combined activities and results of many entities or units.

2. For CIA, the idea of consolidation is the same. A simplified consolidation report can summarize the outcome of many different activities and organizations in a community.

**Consolidation ...**

The consolidation technique makes it possible for complex organizations to aggregate their financial reporting so that a single report gives a fair representation of the underlying operations.

As the organization becomes more complex, the scope for planned misrepresentation increases.

What is powerful and useful for the corporate style GAAP accounting is equally of importance and useful in developing metrics for community impact analysis.

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**Community Impact Accountancy**

**Consolidating Statements.**

1. In organization accounting, consolidating statements show how different units make up the consolidated results.

2. For CIA, a consolidating statement shows similar information. A consolidating statement shows what is working, and what is not.

**Consolidating statements ...**

In GAAP accounting a consolidating statement is used to help analysts understand how the data for the consolidated reports were aggregated, and to give a profile of the performance of the organization.

The same sort of report is useful in the community to show what entities in the community are creating wealth and which are not.

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**Community Impact Accountancy**

**Rules about Consolidations.**

1. The principles of consolidation accounting are quite clear. However, law and practical complexity make consolidation accounting difficult, and in turn, less and less useful.

2. For CIA, the basic principles of consolidation accounting apply. CIA aims to keep complexity to a minimum so that reports can be understood and have value to the public.

**Rules about consolidations ...**

In GAAP accounting there are strong rules about how consolidations are done ... but the strong rules are also complex and subject to many views about what is permitted. Where there is complexity it is possible for clarity to disappear.

Some of the same issues arise in CIA where the focus is on activities in a community. Under CIA, the aim is to highlight alternatives rather than to argue simply for the one approach.
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 using what is known.

While it is better to have a complete set of data, important conclusions can be drawn from only a subset of all the data.

Materiality ...

Modern society is drowned in information that tells us a lot about unimportant matters ... and there is very little reliable information about matters that are very important.

But many analysts do not realize how much time and effort they spend on matters that will have no impact on performance.

And if the analyst does not understand what is material ... what hope is there that they will understand anything.

Modularity ...

Modern society is drowned in information that tells us a lot about unimportant matters ... and there is very little reliable information about matters that are very important.

But many analysts do not realize how much time and effort they spend on matters that will have no impact on performance.

And if the analyst does not understand what is material ... what hope is there that they will understand anything.
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.

Environmental sustainability

There is more hysteria about sustainability as it relates to the environment ... and the issue should not be ignored, but it must be put in perspective, and the use of resources carefully understood.

People are a root cause of environmental degradation, and poor people do damage as well as the economically rich ... but have no other choice. Economic wealth can be used to do things that will have environmental benefit.

Socio-economic sustainability

The welfare model of support for socio-economic development is rarely sustainable ... it takes value creation to ensure sustainability as well as a cost – price – value relationship that is affordable for the market.

Most profit maximizing business is sustainable but only operates in wealthy markets ... leaving the multi-billion BOP underserved. Social business that is low cost, low price, valuable and affordable is key to sustainable progress.
TIME SERIES ANALYSIS

Community Impact Accountancy
Times Series Analysis.

1. Time series analysis answers the all important questions of change over time.

2. While it may not be possible to have absolute numbers about many important things ... time series analysis helps to show whether progress is being made or not, and something about how fast change is happening.

Time series analysis ...
Time series analysis has all sorts of uses ... it may not be easy to know exactly about something ... but it is easier to tell whether the direction is right or not.
Time series analysis helps to explain what is happening, especially if the time series can be related to something that is tangible and recognizable.

Community Impact Accountancy
Times Series of Prices.

1. Time series of prices are very powerful. Every major market has time series data about prices, whether the market is for financial instruments, commodities or engineered items.

2. Price information is also used in small markets ... and is just as powerful. More of the small market data need to be collected and put into accessible form. The outcome will be interesting.

Prices
Price time series have historic value in putting current prices in perspective ... but prices are also a key indicator of what might be going to happen in the immediate future, or ever a longer time span.
A big part of the theory of economics concerns itself with prices and behavior in the market. It is very interesting, however, to try to understand what is happening to prices based on real world facts about costs, demands and structure.

Community Impact Accountancy
Times Series of Costs.

1. Time series of costs may be very different from a time series of prices. Costs reflect productivity, and it is cost that has the most impact on the socio-economic status of the planet.

2. 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.

Costs
Cost time series are very interesting ... but much less accessible than price time series.
Cost is a result of productivity ... which in turn is a result of science, technology, organization, training and investment.
Modern economic society has been blessed with amazing progress in science and technology that has translated into low costs for valuable things. But also high profit and low value for society as a while.
ISSUES, METRICS AND ANALYSIS

Economic Value Adding ...
This has become a very powerful tool in the management of wealth creation, but it is only used in the process of personal wealth creation and ignores the impact that personal wealth creation activities are having on society as a whole.
CIA uses a similar accounting methodology to EVA but including all the impacts that economic activities of all sorts are having on the society.

Multiplier ...
The multiplier effect is perhaps the most important mechanism in economic theory ... yet is rarely talked about in development economics.
CIA does not ignore the multiplier effect and uses it better to understand the behavior of community progress in the face of all the local and external economic activities.

Constraints ...
The progress of development has been much less than was expected 50 years ago ... not because science and technology does not exist ... not because the world is short of wealth and knowhow ... but because there are constraints.
The constraints to success and rapid progress are many ... institutional, traditional, cultural, governmental, etc., etc.
CIA identifies some of these and helps get them addressed.
Value chain analysis ...

The value chain has been a critical element in value creation associated with globalization. But in addition to value creation, there has also been much transfer of value adding from one location. While this has facilitated substantial profit augmentation and benefit to corporate stockholders, it has often come at the expense of value destruction in some societies, and not taken into account in general GAAP accounting.

Winners and losers

Value chain analysis shows who are the winners and losers.

Cost and price determine profit.

Price for the seller becomes cost for the buyer. This next buyer sells for a new price, and profit is again the difference between cost and price. Where are the big profits? Where are the losses? How do valuable raw materials create profit with little benefit to the community of origin?

Transfer prices

Prices are critical in economic analysis and the determination of profit and value to any entity. But we know rather little about prices ... often prices are hidden and prices are kept secret. And even where there is publicity about prices, it is not always clear what the information really means ... price disinformation is as common as price information.
OTHER MATTERS

Community Impact Accountancy

The Cost of CIA.

1. 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.

2. A CIA 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 CIA much lower in cost than it is in value.

The cost of CIA ...
The cost of CIA must be small relative to the economic activities that are going on. Because CIA aims to be useful in low income communities, the cost of CIA is designed to be very very low ... and using only ultra low cost technology and systems. This is possible ...
By building on a huge history of GAAP accounting, Community Impact Accountancy (CIA) has access to a professional community that can very rapidly put depth into the initiative. There is no need to explain basic accounting concepts from scratch … merely to explain the potential of expanding the concepts to the community as a whole rather than simply to the organizational entity.