

# MDIA – Multi Dimension Impact Accounting

## Some Basic Concepts from Accountancy

An initiative for radical reform of the prevailing metrics

Peter Burgess peterbnyc@gmail.com

### **Accounting is Basically Simple**

- Every money transaction in the organization is recorded
- The transactions are organized into accounts and added up
- The totals are organized into periodic reports
- From time to time an auditor checks the process
- There are very many transactions, but the process is simple

#### **Balance Sheet and P&L Accounts**

- There are two sorts of accounts
  - · Balance sheet accounts
  - Profit and loss accounts
- Balance sheet accounts
  - · Assets
  - Liabilities
  - · Owner's equity
- Profit and Loss accounts
  - · Revenues
  - · Costs
  - · Profit

### **Accounting is Immensely Powerful I**

- Financial reports are short
  - for a huge organization like GE, summary is three pages
- There is a Balance Sheet ... a summary of:
  - · Assets
  - Liabilities
  - Owner's equity
- There is a Profit and Loss statement
  - This summarizes the revenues and costs
- There is a Cash Flow statement
  - This summarized the flows of money
- There is selective detail and explanations
  - Some is required by law and regulation
  - Some is used to explain items in the summary information

### **Accounting is Immensely Powerful II**

- Same process to report every time
- This makes comparison easy and meaningful
- With comparison it is easy to ask questions
- Good questions results in good answers

### **Two Ways to Calculate Profit**

- From the Profit and Loss Account
  - Add up all the revenues for the period
  - Add up all the costs for the period
  - The difference is the profit or loss for the period
- From the Balance Sheet
  - Get the owner's equity from the beginning of the period
  - · Get the owner's equity from the end of the period
  - The difference is the profit or loss for the period
- In MDIA progress is similar to profit
- In MDIA state is similar to the balance sheet
  - State has both money and value combined
- In MDIA change in state is progress

#### **Example: Metrics for the Place**

- State of the place
  - · Its natural resources
  - · Its human resources
  - · Its economic activities
  - Its public infrastructure
  - · Its organizational infrastructure
- Progress ... change in state over time
  - · Quality of life for people
  - Impact on planet
  - · Impact on place
  - Profit for business
- Performance
  - How big the progress
  - How much net consumption of non-renewable resources

### **Example: Metrics for the Organization**

- State of the organization
  - The money based balance sheet
  - · The human capital
  - The value of net social valuadd
  - Provision for net resource depletion
  - Provision for environmental degradation
- Profit and impact
  - · The money profit
  - Direct valuadd for people
  - Indirect valuadd for family
  - Indirect valuadd for community
  - · Resource depletion
  - Environmental degradation

### State, Progress and Performance

- State
  - · Is like a balance sheet
- Progress
  - Change in balance sheet over time
- Performance I
  - · Amount of progress in relation to net change in resources
  - How much quality of life improved
  - How much stress on planet reduced
- Performance II
  - How much progress versus how much progress possible

#### **Mark to Market**

- This allows a balance sheet value change to determine profit
  - · Has been used aggressively in the financial sector
  - It has been allowed by rule makers in accountancy
- Mark to market conflicts with other accountancy rules
  - Balance sheet value is 'lower of cost or market value'
- In MDIA the mark to market idea is used as follows:
  - · An economic activity like education improves a person's skills
  - · Improved skills increase a person's opportunities
  - · This will translate into a better job and more income
  - · The present value of more income is an increase State value

#### Standard costs

- A standard cost is the expected cost of an item
  - It is the theoretical engineering cost; and
  - · A provision for operating inefficiencies
- Standard cost accounting simplifies analysis
  - · But does not detract from the utility of analysis
- Variance analysis
  - · Actual costs versus standard costs produces a variance
  - · This can be done at a higher level than the individual item
  - · When there is a material difference it is time for inquiry
  - Otherwise no need for inquiry
- In MDIA a similar approach is used for standard values

#### Invitation

- MDIA is a big idea
- It facilitates radical reform of the prevailing metrics
- The next steps are mainly associated with technology
  - How to build the standard value database
  - How to build a database of 'state of place'
  - How to build a database of 'impact of product'
- Old fashioned easy information also has value
  - Getting this organized and into a database
- Please get in touch. Please help

Peter Burgess – TrueValueMetrics peterbnyc@gmail.com http://www.truevaluemetrics.org