MDIA – Multi Dimension Impact Accounting

Some Basic Concepts from Accountancy

An initiative for radical reform of the prevailing metrics

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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

- 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

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